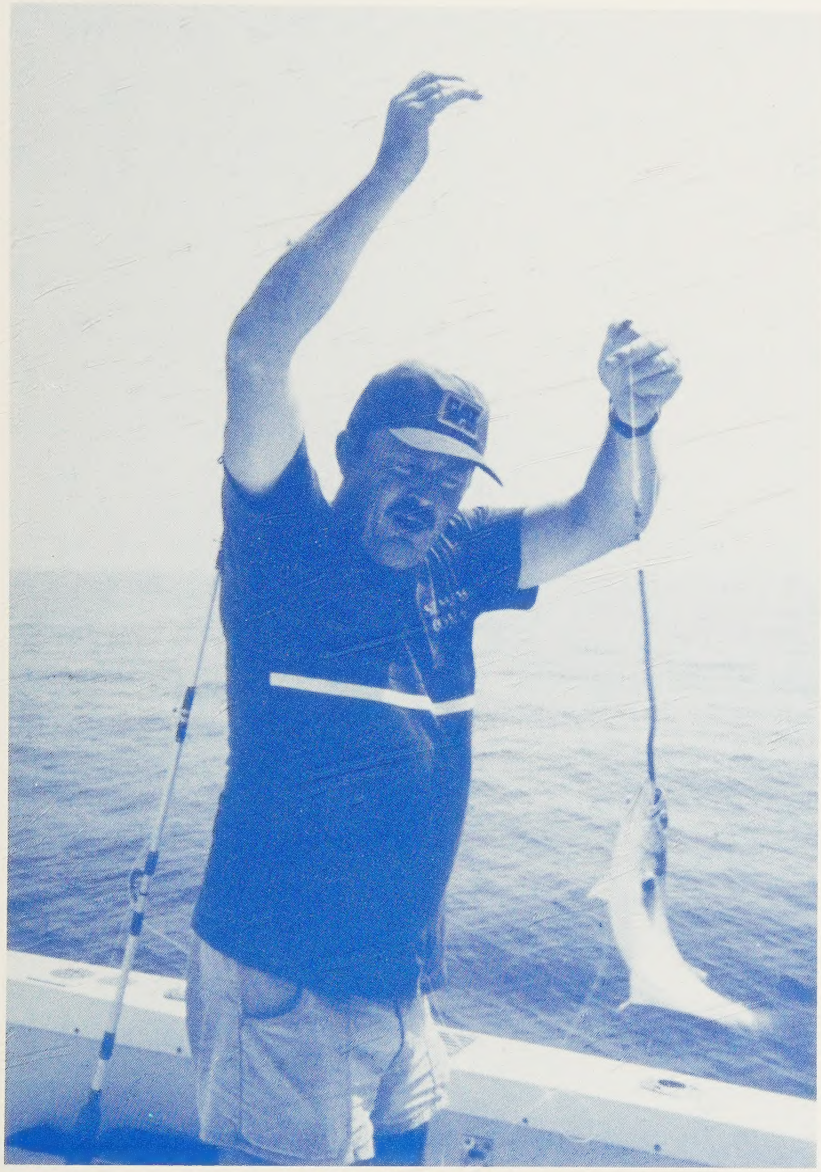
GRANT-IN-AID for FISHERIES



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National Marine Fisheries Service
2570 Dole Street
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1989 PROGRAM REPORT

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
300 South Ferry Street
Terminal Island, CA 90731

February 19, 1991 F/SWR11:JJM

FEB 21 1991

Dr. George W. Boehlert
Director
Honolulu Laboratory
2570 Dole Street
Honolulu, Hawaii 96822-2389

Dear George,

Attached is the Grant-in-Aid for Fisheries report for 1989. The report summarizes all continuing and new projects funded under the Commercial Fisheries Research and Development Act, the Anadromous Fish Conservation Act, and the Interjurisdictional Fisheries Act.

Sincerely,

James J. Morgan
Fishery Biologist

U.S. DEPARTMENT OF COMMERCE
Secretary, Robert S. Mosbacher,

National Oceanic and Atmospheric Administration
Under Secretary for Oceans and Atmosphere
John A. Knauss

National Marine Fisheries Service
Assistant Administrator for Fisheries
William W. Fox, Jr.

GRANT-IN-AID FOR FISHERIES 1989 ANNUAL REPORT

This report has been prepared by the following grants program staff of the National Marine Fisheries Service:

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Recreational and Interjurisdictional
Fisheries Division
Silver Spring, Maryland

AUTHORIZATION

This report is submitted in compliance with Section 9(a) of the Fish and Wildlife Act of 1956, as amended, 16 U.S.C. 742d(7); Section 2 of the Anadromous Fish Conservation Act of 1965, as amended, 16 U.S.C. 757b and Section 307 of Title III of Public Law 99-659, the Interjurisdictional Fisheries Act of 1986, 16 U.S.C. 4106.

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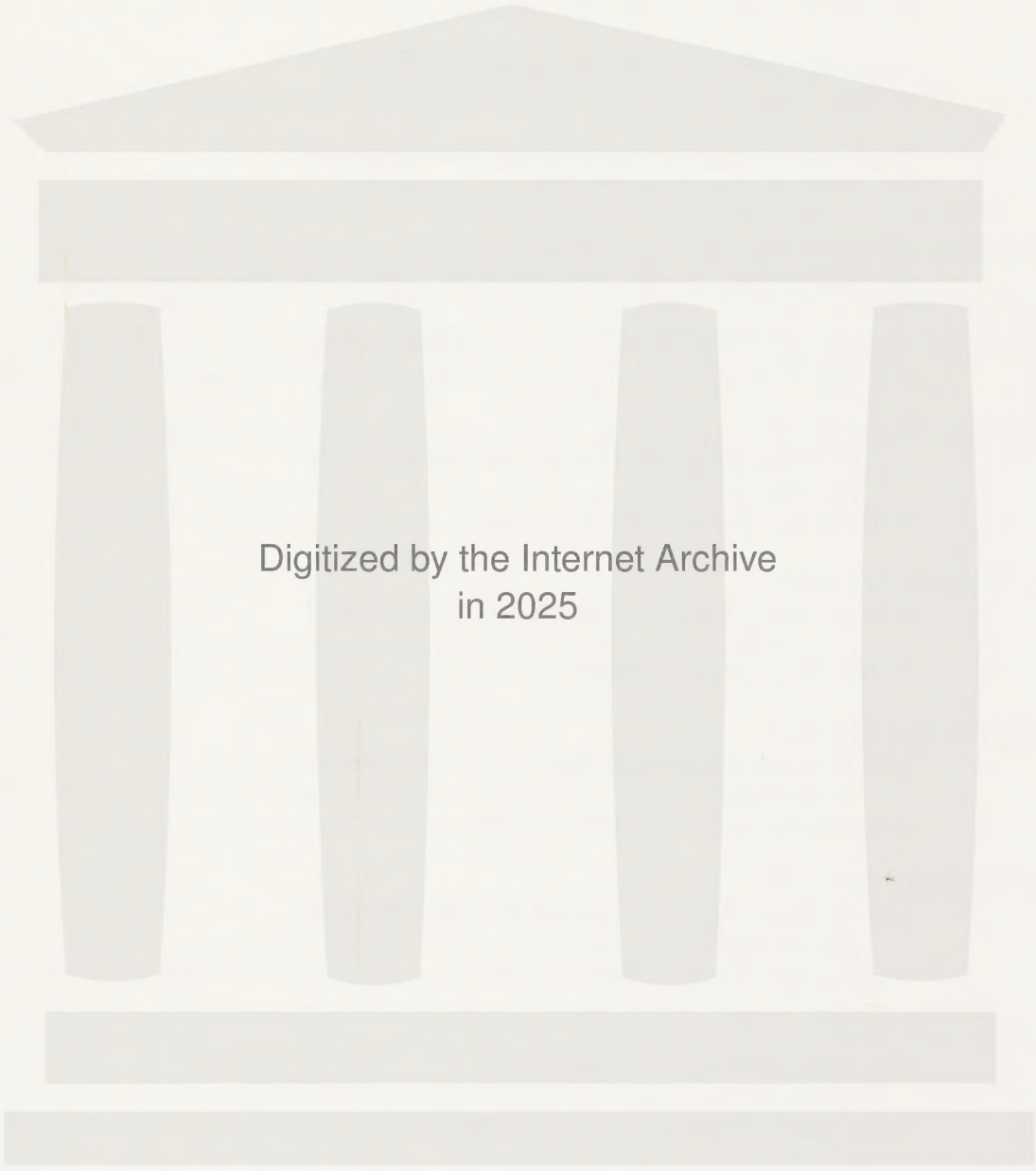
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GRANT-IN-AID FOR FISHERIES

1989 PROGRAM ACTIVITIES

INTRODUCTION

This is the 21st edition of the report of program activities published under the Grant-in-Aid for Fisheries Program of the Office of Fisheries Conservation and Management, National Marine Fisheries Service (NMFS). This NMFS Grant-in-Aid Program is currently authorized under two Acts: the Interjurisdictional Fisheries Act of 1986, (**IJ**, Title III of Pub. L. 99-659) and the Anadromous Fish Conservation Act (**AFC**, Pub. L. 89-304). There are still a few projects listed that were funded under the Commercial Fisheries Research and Development Act (Pub. L. 88-309). These projects have been continued using funds appropriated in prior fiscal years. Descriptions of these programs are provided below.

The Program Analysis section of the report is divided into five sections, each encompassing one of the five NMFS regions. States are listed alphabetically within each region. Each project entry includes all the information regarding a given project. Each section contains a contact for the region and a list of those states in that region. A Highlights section precedes the project descriptions. This provides an overview of the Region's grant activity during the year and lists and describes the ongoing and completed projects. The program analysis section includes a project description and funding source, the project number, the principal contact, the status of the project, whether ongoing (years) or completed (year), the project segment cost (if it is longer than one year), and the total estimated cost for both Federal and state shares on projects estimated at longer than one year.

1. *The Interjurisdictional Fisheries Act of 1986, Title III of Public Law 99-659.*

This law is a formula-based financial assistance program, with two overall purposes: (1) to promote and encourage state activities in support of the management of interjurisdictional fisheries resources, and (2) to promote the management of interjurisdictional fishery resources throughout their range. Any state may, through its state agency or interstate commission, submit a research program which supports management of fishery resources a) for which a fishery occurs in waters under the jurisdiction of one or more states and the Exclusive Economic Zone, b) for which there exists an interstate fishery management plan, or c) which migrate between the waters under the jurisdiction of two or more states bordering on the Great Lakes. Federal funds up to 75 percent, or 90 percent when states have adopted fishery regulations which are consistent with an interstate or Federal fishery management plan for the species to which the study applies, may be used to finance project costs. Projects to alleviate resource disasters or enforce interjurisdictional fishery regulations may be financed totally with Federal funds. A funding level of $5,000,000 was authorized through 1989 for grants under Section 308(a). Section 308(b) is designated to alleviate resource disasters and was authorized at $2,500,000 for each fiscal year through 1989; however, funds were not appropriated for resource disasters in 1989. An additional $330,000 was authorized through fiscal year 1989 under Section 308(c) to support the development of fishery management plans by the three Interstate Marine Fishery Commissions. Funds are made available to the states based on an apportionment formula that is explained in the implementing regulations. A copy is available from any of the grant coordinators listed at the front of each section.

2. *The Anadromous Fish Conservation Act of 1965 (Public Law 89-304, as amended)*

This law authorizes the Secretary of Commerce and the Secretary of the Interior to enter into cooperative agreements with states and other non-Federal interests for the conservation, development, and enhancement of the anadromous fishery resources of the Nation and the fish in the Great Lakes and Lake Champlain that ascend streams to spawn, and for the control of the sea lamprey. The program is administered at the Federal level jointly by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service. The amount of Federal funds that may be used to finance projects varies; for most, Federal funds provide 50 percent of the cost, but can support 66.7% of projects when two or more states cooperate, or 90% when the project supports an interstate fishery management plan. State fishery agencies, colleges, universities, private companies, and other non-Federal interests in 31 states bordering the oceans and the Great Lakes may participate under the Act. All projects must be coordinated with the state fishery agency concerned. Authorization for this Act was renewed

under Section 4. The Emergency Striped Bass Research Study, Section 7 of this Act,was reauthorized for fiscal years 1989 -1991 at $1 million yeach year by Pub. L. 100-589.

3. *The Commercial Fisheries Research and Development Act of 1964 (Pub. L. 88-309) (Repealed effective October 1, 1987, with the passage of the Interjurisdictional Fisheries Act of 1986, Title III of Pub. L 99-659)*

This law authorized the Secretary of Commerce to cooperate with the 50 states, the Commonwealth of Puerto Rico, the Northern Mariana Islands, and the Governments of the Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands, in research and development projects of the Nation's commercial fisheries. Projects for research, development, construction, and coordination were eligible for funding. Cost-sharing projects were funded up to 75 percent, with a state match of 25 percent. Disaster assistance programs required no matching funds.

DOLLAR EXPENDITURES BY PUBLIC LAWS

AND DISCUSSION OF MAJOR PROJECT ACTIVITIES

FISCAL YEAR 1989

All 50 states, the Commonwealths of Puerto Rico and the Northern Mariana Islands, the Governments of American Samoa, Guam, the Virgin Islands, and the Trust Territory of the Pacific Islands participate in these grant programs. In FY 1989, 112 were projects initiated, continued, or completed under the various programs. During 1989, 11 projects were still in progress under the Commercial Fisheries Research and Development Act, but no dollars were spent. The IJ funded 65 projects, and 36 projects were ongoing or completed under AFC. Each law is specific on its matching requirements. However, the state match required may be 10%, 25%, 33 1/3%, 50%, or 0% in the case of Disaster Assistance Funds, Enforcement, the Commissions and the island states. Often the states provide more of a match than is required by law. This may occur for a variety of reasons, but it is usually because of less Federal dollars being available to fund projects and therefore the states increase their matching amounts accordingly.

Programs funded in 1989 provided information on conservation, development, enhancement, through workshops and fishery management plans. The Anadromous Fish Conservation Act provides funding for anadromous species of which striped bass, shad and river herrings (alosids) are the major species funded on the East and Gulf Coasts. Expenditures for striped bass activities in fiscal year 1989 exceeded $500,000 and $670,000 was spent on alosids. Approximately $1.8 million was spent on salmon research and management information projects on the West Coast . A large portion of funds expended under the IJ are for obtaining information on fisheries stocks. These projects are listed under the headings of statistics or stock assessment. Management decisions would be difficult without the information gathered from these studies. For specific projects on these species refer to the index which lists those states involved.

The IJ allows a state to use $25,000 of its regular apportionment to carry out an agreement with the Secretary of Commerce or the Secretary of the Interior for mutual enforcement of state and Federal laws pertaining to the protection of fishery resources. During FY 1989, three states (New Jersey, Rhode Island, and Mississippi) took advantage of this opportunity.

This law also allocates funds to the three Interstate Marine Fisheries Commissions (Atlantic, Gulf, and Pacific) for the development of interstate fishery management plans. In 1989, $110,000 was available to each Commission for this purpose with no matching requirement. See the index for a more complete listing of program areas.

A table on page four provides a breakdown of funds made available to the states, and other entities under the Acts. The amount listed under the IJ is what the state qualifies for through the apportionment formula. This amount is not necessarily what the state, entity or Commission actually receives in any fiscal year, nor do all states qualify to receive the money. Each state must meet the requirements of the Act to qualify for funds and each project must further meet certain requirements (see discussion on page one). Under the AFC, only states that are involved in the conservation and management of anadromous fisheries actually receive funds; therefore, many states show no funds being received.

APPORTIONMENT OF FEDERAL FUNDS BY STATE AND AUTHORIZATION ($1,000's)

Distribution of Federal funds to the States, other entities and Commissions under two National Marine Fisheries Service fisheries grant programs is provided in the following tabulation. This table accounts for money available through Title III of P.L. 99-659 and P.L. 89-304. For more information on these two programs refer to the introduction of this document.

STATES AND OTHER	TOTAL FY 1989 P.L. 99-659	TOTAL FY 1989 P.L.89-304	CUMULATIVE TOTAL P.L. 99-659	CUMULATIVE TOTAL P.L. 89-304	GRAND TOTAL
ALABAMA	54.6	12.4	111.1	881.1	992.2
ALASKA	230.2	426.4	455.1	9,956.0	10,411.1
ARIZONA	19.2	-	37.8	-	37.8
ARKANSAS	19.2	-	37.8	-	37.8
CALIFORNIA	230.2	347.0	455.1	6,984.0	7,439.1
COLORADO	19.2	-	37.8	-	37.8
CONNECTICUT	19.2	72.0	37.8	739.0	776.8
DELAWARE	19.2	-	37.8	84.0	121.8
FLORIDA	230.2	-	455.1	91.0	546.1
GEORGIA	38.4	18.0	62.3	204.7	267.0
HAWAII	38.4	-	68.3	-	68.3
IDAHO	19.2	-	37.8	-	37.8
ILLINOIS	19.2	-	37.8	21.0	58.8
INDIANA	19.2	-	37.8	-	37.8
IOWA	19.2	-	37.8	-	37.8
KANSAS	19.2	-	37.8	-	37.8
KENTUCKY	19.2	-	37.8	-	37.8
LOUISIANA	230.2	11.0	455.1	100.0	555.1
MAINE	164.5	50.0	333.8	1,128.4	1,462.2
MARYLAND	83.6	60.0	167.5	1,615.1	1,782.6
MASSACHUSETTS	230.2	69.0	455.1	1,456.1	1,911.2
MICHIGAN	19.2	-	37.8	584.0	621.8
MINNESOTA	19.2	-	37.8	23.0	60.8
MISSISSIPPI	205.7	20.0	430.6	488.0	918.6
MISSOURI	19.2	-	37.8	20.0	57.8
MONTANA	19.2	-	37.8	-	37.8
NEBRASKA	19.2	-	37.8	-	37.8
NEVADA	19.2	-	37.8	-	37.8
NEW HAMPSHIRE	19.2	-	37.8	1,340.0	1,397.8
NEW JERSEY	100.4	20.0	204.8	304.5	489.3
NEW MEXICO	19.2	-	37.8	-	37.8
NEW YORK	54.8	230.0	108.3	1,824.5	1,932.8
NORTH CAROLINA	124.3	24.0	274.3	1,038.6	1,312.9
NORTH DAKOTA	19.2	-	37.8	-	37.8
OHIO	19.2	-	37.8	96.0	133.8
OKLAHOMA	19.2	-	37.8	-	37.8
OREGON	101.5	488.8	186.1	9,354.9	9,541.0
PENNSYLVANIA	19.2	-	37.8	75.0	112.8
RHODE ISLAND	103.6	20.0	213.6	444.7	658.3
SOUTH CAROLINA	38.4	35.0	60.4	620.3	680.7
SOUTH DAKOTA	19.2	-	37.8	-	37.8
TENNESSEE	19.2	-	37.8	-	37.8
TEXAS	226.5	11.0	451.4	11.0	462.4
UTAH	19.2	-	37.8	-	37.8
VERMONT	19.2	-	37.8	-	37.8
VIRGINIA	230.2	158.0	455.1	2,451.7	2,906.8
WASHINGTON	176.3	488.8	332.0	13,724.8	14,056.8
WEST VIRGINIA	19.2	-	37.8	-	37.8
WISCONSIN	38.4	45.0	63.9	510.0	573.9
WYOMING	19.2	-	37.8	-	37.8
OTHER ENTITIES:					
AMERICAN SAMOA	132.7	-	253.3	-	253.0
GUAM	19.2	-	37.8	-	37.8
PUERTO RICO	120.3	-	220.0	-	220.0
VIRGIN ISLANDS	19.2	-	37.8	-	37.8
NORTHERN MARIANAS	58.8	-	137.6	-	137.6
MARINE FISHERIES COMMISSIONS:					
ATLANTIC STATES	110.0	-	219.3	293.0	512.3
GULF STATES	110.0	-	219.3	-	219.3
PACIFIC STATES	110.0	67.5	219.3	593.5	812.8
TOTAL:	4223.6	2573.9[1]/	8,239.6	57,057.9	65,297.5

1/ Includes Emergency Striped Bass Act funding money Section 7 of P.L. 89-304.

NORTHEAST REGION

The Northeast Region covers territory ranging through 19 states and includes all the Great Lakes states. Information on fiscal year 1989 federally funded projects is available from:

National Marine Fisheries Service
Northeast Regional Office
One Blackburn Drive
Gloucester, MA 01930

Richard B. Roe, Regional Director
Harold C. Mears, Grant-In-Aid Coordinator
Telephone (508) 281-9243

States:

Connecticut	Massachusetts	Ohio
Delaware	Michigan	Pennsylvania
Illinois	Minnesota	Rhode Island
Indiana	New Hampshire	Vermont
Maine	New Jersey	Virginia
Maryland	New York	West Virginia
		Wisconsin

HIGHLIGHTS OF THE NORTHEAST REGION GRANT ACTIVITIES

During the second year of funding under the Interjurisdictional Fisheries Act, the Northeast Regional States continued projects addressing shared state and Federal research and management priorities on the region's commercial and recreational fishery resources. Several studies were either implemented or continued on resources for which a fishery occurs under the jurisdiction of one or more states and the Exclusive Economic zone (Federal waters ranging 3-200 miles from the shore). These studies included lobster population investigations in Maine, New Hampshire, Connecticut and New York, as well as an Atlantic herring recruitment project in Maine. Other studies were directed toward fish species for which there exists an interstate fishery management plan adopted by the Atlantic States Marine Fisheries Commission (ASMFC). These included finfish and shellfish trawling surveys in Massachusetts, Rhode Island and Delaware which monitor population abundance of bluefish, weakfish, lobster and summer flounder. Investigations of fishery resources which migrate between the waters of two or more States bordering the Great Lakes were conducted on whitefish populations (MI), lake trout abundance in Lake Superior (MN), and catfish contaminant levels in Lake Erie (OH).

Under the Anadromous Fish Conservation Act, American shad and river herring research was continued in Maine, Massachusetts, Connecticut, and Virginia. Projects to ascertain the status and migratory movements of the endangered shortnose sturgeon were conducted by Connecticut and the University of Massachusetts, and striped bass tagging projects were funded in New York, New Jersey, and Virginia. A milestone was achieved during 1989 by the ASMFC with the adoption and publication of Amendment No. 4 to the Interstate Fishery Management Plan (FMP) for Striped Bass. This revision to the FMP allows consideration of controlled sport and commercial harvest for striped bass fisheries throughout state waters from Maine to North Carolina. The plan amendment recommends a 28-inch size limit in coastal areas and an 18-inch size limit for the Hudson River, Chesapeake Bay and Ablermarle Sound. The ASMFC's Interstate Fisheries Management Program was initiated through a cooperative agreement with the National Marine Fisheries Service in 1980. This relationship, through direct funding support under the Grant-In-Aid for Fisheries Program, promotes cooperative management of striped bass and other marine, estuarine, and anadromous fisheries in state waters of the Atlantic Coast.

PROJECT DESCRIPTIONS

The following is a description of the projects that were initiated, ongoing or completed in the Northeast. The projects that end in an **R or D** refer to the Commercial Fisheries Research and Development Act and are for "R"esearch or "D"evelopment. Those projects that are listed with and "AFC" prefix are funded under the Anadromous Fish Conservation Act. Those projects with "IJ" are funded under the Interjurisdictional Fisheries Act. All projects are listed alphabetically by state. All projects within a state list the 88-309 projects, then the 89-304, and then the 99-659 projects. The number following the AFC code refers to the number of projects that have been approved in a particular state in that region under that particular program. In the instance 3-IJ-4 means that is the fourth project approved under the Interjurisdictional Fisheries Act in the Northeast Region, the "3" is the designation for the Northeast Region, each region has a different designation.

ATLANTIC STATES MARINE FISHERIES COMMISSION

ANADROMOUS FISH CONSERVATION ACT

Project Description: Reevaluation of interstate striped bass conservation and management planning activities

Project number: AFC-2

Purpose: Reassess the goals and objectives pertaining to cooperative, interstate management of striped bass and revise the existing Interstate Fisheries Management Plan as may be necessary to address developments in the resource and fishery over the past six years. In this process, project will synthesize research information into a form that will delineate management options appropriate for multi-state implementation.

Contact: Paul Perra
Agency: Atlantic States Marine Fisheries Commission
Status: 5 year project
Date Initiated: 1985

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: **$**	0	Federal:	102,000
State:	0	State:	51,000

Publications: Atlantic States Marine Fisheries Commission, 1989b.
****

Project Description: Emergency Striped Bass Study workshops

Project number: AFC-3 (Section 7)

Purpose: Organize, conduct, and prepare draft proceedings for two striped bass workshops, the purpose of which is to present and address the findings of striped bass investigations as well as to provide state fishery managers with current scientific data so that joint management measures for this species may be implemented effectively.

Contact: Paul Perra
Agency: Atlantic States Marine Fisheries Commission
Status: 6 year project
Date Initiated: 1985

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	0	Federal:	66,000
State:	0	State:	0

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: ASMFC interstate fisheries management program.

Project number: 3-IJ-2

Purpose: Achieve cooperative interstate management of shared territorial seas fisheries of the Atlantic Coast through the development, preparation, implementation, review, and revision of fishery management plans. The Commission promotes better utilization of the fisheries of the Atlantic Coast by administering a joint program designed to promote and protect such fisheries.

Contact: Paul Perra
Agency: Atlantic States Marine Fisheries Commission
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project**	
Federal: $	109,440	Federal:	335,773
State:	0	State:	0

Publications: Atlantic States Marine Fisheries Commission, 1989a.
****

Project Description: Research and analysis supporting interstate management of shad and river herring.

Project number: 3-IJ-28

Purpose: Identify and assess research needs relative to the protection and restoration of anadromous alosids along the Atlantic seaboard. Due to the migratory nature of these species, study results will be jointly evaluated to promote an active interchange of ongoing research among the concerned state fisheries agencies. This exchange of information is essential in effectively monitoring the Interstate Fishery Management Plan for American Shad and River Herring.

Contact: Paul Perra
Agency: Atlantic States Marine Fisheries Commission
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: $	19,185	Federal:	38,925
State:	6,395	State:	12,642

Publications: none
****

CONNECTICUT

ANADROMOUS FISH CONSERVATION ACT

Project Description: Population dynamics studies of American shad in Connecticut.

Project number: AFC-17

Purpose: To monitor and evaluate, through field sampling, relative abundance/fluctuations in shad population size; and to monitor both the sport and commercial shad harvest in the Connecticut and Thames Rivers. Results will directly contribute to research and information needs identified in the Interstate FMP for this species.

Contact: Thomas Savoy
Agency: Department of Environmental Protection
Status: 3 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: $	45,000	Federal:	145,000
State:	45,000	State:	145,000

Publications: none
****

Project Description: Shortnose sturgeon status in Connecticut

Project number: AFC-18

Purpose: Determine population levels, location, and movements of shortnose sturgeon in the Connecticut and Thames Rivers. Biological sampling will includes gillnetting, trawling, scuba surveys, and marking/fin clipping experiments. Project results will provide information necessary to promulgate effective regulations necessary to protect and conserve this endangered species.

Contact: Thomas Savoy
Agency: Department of Environmental Protection
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: $	27,000	Federal:	93,000
State:	27,000	State:	93,000

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Connecticut lobster (Homarus americanus) population recruitment studies.

Project number: 3-IJ-4

Purpose: Study adult population characteristics, larval ecology, and juvenile abundance of American lobster in Long Island Sound. Study results will be used to forecast annual abundance of the adult, legal size portion of the Long Island Sound lobster stock for resource management purposes.

Contact: Mark Blake
Agency: Department of Environmental Protection
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project**	
Federal: $	19,185	Federal:	85,000
State:	19,185	State:	85,000

Publications: none
****

DELAWARE

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Delaware oyster bed restoration

Project number: 3-IJ-1 (Section 308[b])

Purpose: Continue restoration efforts for the American oyster population in Delaware Bay that has been severely damaged by the disease organism MSX. Oyster shell cultch will be planted to expand natural oyster beds and provide new substrate for settling oyster spat.

Contact: Richard Cole
Agency: Department of Natural Resources and Environmental Control
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: **$**	0	Federal:	239,130
State:	0	State:	0

Publications: none
****

Project Description: Coastal finfish stock assessment survey

Project number: 3-IJ-27

Purpose: Determine trends in abundance of Delaware's coastal fish stocks. Develop a pre-recruitment index for weakfish, bluefish, and summer flounder to be incorporated into coastwide fishery assessment and management efforts.

Contact: Richard Cole
Agency: Department of Natural Resources and Environmental Control
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project**	
Federal: **$**	19,185	Federal:	93,745
State:	6,395	State:	31,235

Publications: none
****

MAINE

ANADROMOUS FISH CONSERVATION ACT

Project Description: Androscoggin River anadromous fish enhancement.

Project number: AFC-28

Purpose: Restore anadromous runs of American shad and other alosids to the Androscoggin River. Determine the timing, magnitude, sex composition, and year class strength of alosid populations, with particular emphasis placed on juvenile alewives.

Contact: Lewis N. Flagg
Agency: Department of Marine Resources
Status: 3 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	50,000	Federal:	200,000
State:	50,000	State:	200,000

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Transboundary Herring Studies

Project number: 3-IJ-10

Purpose: Continue to assess the importance of Eastern Maine and Southwestern New Brunswick spawning sites by tracking the dispersal of Atlantic herring through both the juvenile and adult stages between Canadian and United States waters. Study results will enable the State to effectively address transboundary management concerns for this species.

Contact: Stanley B. Chenowith
Agency: Department of Marine Resources
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	97,343
State:	0	State:	97,343

Publications: none
****

Project Description: Maine Lobster Stock Assessment

Project number: 3-IJ-33

Purpose: Conduct commercial fishing port and on-board sampling along the Maine coast in conjunction with complementary life history and gear selectivity studies. Information gathered will focus on recruitment, reproductive potential, movement, growth, and distribution of juvenile lobsters. The data will be used to assess the current status of the lobster resource in Maine for management purposes.

Contact: Jay S. Krouse
Agency: Department of Marine Resources
Status: 3 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	79,082	Federal:	267,320
State:	79,082	State:	267,320

Publications: Krouse, 1989.
****

Project Description: Transboundary Herring Investigation

Project number: 3-IJ-34

Purpose: Assess the importance of Eastern Maine and Southwestern New Brunswick spawning sites by tracking the dispersal of Atlantic herring through both the juvenile and adult stages between Canadian and United States waters. Study results will enable the State to effectively address transboundary management concerns for this species.

Contact: Stanley B. Chenowith
Agency: Department of Marine Resources

Status: 3 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	85,344	Federal:	164,030
State:	85,344	State:	164,029

Publications: Chenowith, Libby, Stephenson, and Power, 1989.
****

MARYLAND

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project Description: Development of Chesapeake Bay oyster management strategy.

Project number: 3-422-D(4b)

Purpose: To develop a Chesapeake Bay oyster management strategy to restore the American oyster resource in Maryland waters that has been severely damaged by the disease organism MSX. Project activities will include: (1) planting of shell on natural oyster bars which will provide new substrate for larval attachment; and (2) planting of seed oysters to supplement natural spat set.

Contact: George E. Krantz
Agency: Department of Natural Resources
Status: 2 year project (Completed)
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	1,435,000
State:	0	State:	0

Publications: none
****

ANADROMOUS FISH CONSERVATION ACT

Project Description: Egg production and larval abundance of striped bass and white perch in the Potomac River and Upper Chesapeake Bay.

Project number: AFC-17

Purpose: To evaluate through laboratory field investigations, striped bass and white perch comparative egg/larval survival, and ascertain how adult female size/age affects egg quality and subsequent mortality levels. Resultant data will be utilized in population assessments and management of these valuable anadromous fish resources within the Chesapeake Bay.

Contact: Edward D. Houde
Agency: Department of Natural Resources
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	40,000
State:	0	State:	65,743

Publications: none
****

Project Description: Maryland striped bass hooking mortality

Project number: AFC-18 (Section 7)

Purpose: Evaluate through field activities hook and release mortality of striped bass. Project work will focus on examining the effects of salinity on hooking mortality, and the relationships between mortality rates and fish size. Data derived from this study will contribute to information needs identified in the Interstate Management Plan for this species.

Contact: Eric B. May
Agency: Department of Natural Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	15,000	Federal:	15,000
State:	11,250	State:	11,250

Publications: none
****

Project Description: Anadromous fish restoration in Big Elk Creek

Project number: AFC-19

Purpose: To restore healthy spawning populations of American shad and river herring in Big Elk Creek at the head of Chesapeake Bay. The approach will incorporate trapping of adult pre-spawning fish and transplanting in the target area, rearing, and release of imprinted juveniles and construction of a fish ladder to provide additional spawning habitat.

Contact: C. J. O'Dell
Agency: Department of Natural Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	45,000	Federal:	45,000
State:	45,000	State:	45,000

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Maryland fisheries statistics.

Project number: 3-IJ-20

Purpose: Maintain a comprehensive catch reporting system which focuses on the harvest, value, and effort of Maryland's interjurisdictional fisheries resources. Analysis of this data will provide information necessary for determining effects of fishery management decisions and developing fishery management plans.

Contact: Christopher Bonzek
Agency: Department of Natural Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	84,027	Federal:	84,027
State:	84,027	State:	84,027

Publications: none

****

MASSACHUSETTS

ANADROMOUS FISH CONSERVATION ACT

Project Description: Anadromous fisheries management.

Project number: AFC-21

Purpose: A program which maintains and enhances existing populations, restores historically important anadromous populations and establishes new populations of anadromous fish, through transplants and construction of fish passage facilities. Emphasis will also be given to biological evaluation of restoration efforts and a survey of Atlantic and shortnose sturgeon populations in the Merrimack River.

Contact: Joseph DiCarlo
Agency: Division of Marine Fisheries
Status: 5 year project
Date Initiated: 1986

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	69,000	Federal:	215,000
State:	69,000	State:	215,000

Publications: none

****

Project Description: Hook and release mortality of striped bass

Project number: AFC-22 (Section 7)

Purpose: To evaluate through field activities hook/release mortality rates of striped bass. Attempt to assess which variety of factors influence the probability of survival of fish captured by hook and line and subsequently released. These factors will include environmental data, individual fish characteristics, gear type, and landing/handling techniques.

Contact: Paul Diodati
Agency: Division of Marine Fisheries
Status: 2 year project (Completed)
Date Initiated: 1987

Current Year Segment Cost:		Total Cost over life of project:	
Federal:	0	Federal:	63,000
State:	0	State:	7,000

Publications: none

****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Massachusetts fishery resource assessment.

Project number: 3-IJ-3

Purpose: Monitor coastal distribution, abundance, size composition, and health of fishery resources inhabiting inshore and coastal waters of Massachusetts. Project data provides timely fisheries information for managing marine fishery resources in state waters.

Contact: Arnold Howe
Agency: Division of Marine Fisheries
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: $	59,250	Federal:	235,385
State:	207,000	State:	636,415

Publications: none
****

Project Description: Interjurisdictional fisheries management support program.

Project number: 3-IJ-16

Purpose: Provide services to the fishing and seafood industry by advising participants on fisheries management considerations/strategies, assessing constituent concerns on these issues and informing resource managers of related, potential problems. Particular emphasis will be placed on gear research technology to improve gear selectivity which will result in the development of appropriate management schemes and regulations for the wise utilization and conservation of marine fishery resources.

Contact: Buell Hollister and H. Arnold Carr
Agency: Division of Marine Fisheries
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: $	73,340	Federal:	221,658
State:	60,006	State:	181,358

Publications: none
****

Project Description: Fisheries statistics and automated data processing.

Project number: 3-IJ-29

Purpose: Continue to collect, analyze, and disseminate fishery landings data by species and gear of Massachusetts interjurisdictional fishery resources. As a member of the Northeast Statistics Program, project results will be utilized to meet the requirements of state, interstate, and Federal fisheries agencies responsible for the management of marine resources within internal waters and territorial seas of the individual states and the Exclusive Economic Zone.

Contact: Charles O. Anderson
Agency: Division of Marine Fisheries
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	61,630	Federal:	287,675
State:	108,036	State:	106,255

Publications: Hoopes, 1989.

****

MICHIGAN

ANADROMOUS FISH CONSERVATION ACT

Project Description: Evaluation of anadromous fish gill netting mortality in large mesh gill nets in an exploratory commercial fishery for Siscowet trout in Lake Superior.

Project number: AFC-16

Purpose: Determine the immediate and long term effect of this exploratory fishery upon resident and anadromous salmonids and lean lake trout populations. Data gathered will include monitoring incidental catch rates, in large mesh gillnets of these species as well as predation of them by Siscowets.

Contact: Richard Schorfhaar
Agency: Department of Natural Resources
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	15,000	Federal:	75,000
State:	15,000	State:	75,000

Publications: none

****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Assessment of whitefish populations in the treaty area of Lake Michigan.

Project number: 3-IJ-17

Purpose: Monitor whitefish harvest in the commercial trapnet fishery, determine relative abundance of pre-recruits, and forecast the total allowable yield of whitefish in the treaty waters of Lake Michigan.

Contact: Philip SchneebergerW. C. Latta
Agency: Department of Natural Resources
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	19,185	Federal:	120,000
State:	6,395	State:	40,000

Publications: none

****

MINNESOTA

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Lake Superior commercial fisheries assessment studies.

Project number: 3-IJ-12

Purpose: Ascertain and monitor the status of the lake trout and commercial fish stocks in the Minnesota waters of Lake Superior. Determine annual production and relative abundance indices and the degree of interaction between different types of fishing, including sport fishing. Project data will be analyzed to aid decision making in the rehabilitation and utilization of these resources.

Contact: Donald R. Schreiner
Agency: Department of Natural Resources
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal:	19,185	Federal:	112,500
State:	6,395	State:	7,500

Publications: none

****

NEW HAMPSHIRE

ANADROMOUS FISH CONSERVATION ACT

Project Description: Distribution and abundance of shortnose sturgeon (**Acipenser brevirostrum**) in the Great Bay Estuary and coastal New Hampshire.

Project number: AFC-7

Purpose: To determine the distribution and abundance of shortnose sturgeon in the Great Bay estuary and coastal New Hampshire waters. Information gathered will enable a better understanding of the sturgeon's habitat requirements and foster State/Federal efforts to assess the status of this endangered species.

Contact: John I. Nelson
Agency: Fish and Game Department
Status: 2 year project (Completed)
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	18,000
State:	0	State:	18,000

Publications: none

****

Project Description: The timing of juvenile river herring downstream migration.

Project number: AFC-8

Purpose: Determine the timing of juvenile river herring downstream migration through selected New Hampshire waters. Juvenile fish will be sampled utilizing a variety of nets to determine both their size and location when migration does occur. Information obtained will aid in protecting and managing this resource effectively.

Contact: Robert Fawcett
Agency: Fish and Game Department.
Status: 2 year project (Completed)
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	40,300
State:	0	State:	40,300

Publications: none

****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Assessment of American lobster (Homarus americanus) nursery potential in Great Bay estuary.

Project number: 3-IJ-22

Purpose: Determine the distribution and abundance of lobster in coastal and estuarine waters of New Hampshire. Relationships between larval distribution and the possible use of estuaries as nursery grounds will be investigated. The data will be used to assess the current status of the lobster resource in New Hampshire waters for management purposes.

Contact: John I. Nelson
Agency: Fish and Game Department.
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:$	19,185	Federal:	37,910
State:	6,395	State:	12,637

Publications: none

****

NEW JERSEY

ANADROMOUS FISH CONSERVATION ACT

Project Description: Anadromous herring run restoration project.

Project number: AFC-11

Purpose: Identify and evaluate New Jersey coastal watersheds on the basis of potential enhancement/restoration of anadromous clupeid populations.

Contact: Donald Byrne
Agency: Division of Fish, Game and Wildlife
Status: 2 year project (Completed)
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	22,500
State:	0	State:	22,500

Publications: none

****

Project Description: New Jersey striped bass tagging program

Project number: AFC-12 (Section 7)

Purpose: Ascertain and monitor the movements and distribution of striped bass found within New Jersey's portion of Delaware Bay through implementation of a coastwide tagging survey. Tag return information will aid current restoration efforts required under the Interstate Fisheries Management Plan for this species.

Contact: Peter J. Himchak
Agency: Division of Fish, Game and Wildlife
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	20,000	Federal:	20,000
State:	2,222	State:	2,222

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Emergency oyster seed bed revitalization project.

Project number: 3-IJ-5

Purpose: Improve the production potential of the oyster producing areas of the State with emphasis upon those beds which lie within the confines of Delaware Bay. Qualitative, bottom sediment investigations will be undertaken on known seed beds to determine their oyster production potential. Shell cultch will be planted for enhancement of suitable substrate for oyster larval (spat) attachment.

Contact: Thomas W. McCloy
Agency: Division of Fish, Game and Wildlife
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	0	Federal: $	180,000
State:	0	State:	0

Publications: none
****

Project Description: Interjurisdictional fisheries enforcement.

Project number: 3-IJ-13

Purpose: Conduct cooperative enforcement activities designed to support the management of selected interjurisdictional marine species in the Exclusive Economic Zone and state territorial waters. Investigative activities will include land, sea, and air patrols to monitor the commercial and recreational harvesting and landing of striped bass, summer flounder, lobster, and surf clam in support of state/federal resource management objectives.

Contact: Raymond Krischner
Agency: Division of Fish, Game and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	25,000	Federal:	75,000
State:	2,778	State:	8,334

Publications: none
****

Project Description: Inventory of New Jersey's surf clam resources.

Project number: 3-IJ-15

Purpose: Determine the relationships between the standing stock, size, distribution, settling patterns of juvenile surf clams and their associated mortality rates along the coastal waters of New Jersey. This information will assist both state and federal fisheries managers to ensure development and implementation of sound management practices of this valuable resource.

Contact: Thomas W. McCloy
Agency: Division of Fish, Game and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: **$**	75,375	Federal:	223,425
State:	8,375	State:	24,826

Publications: none
****

Project Description: Assessment of interjurisdictional fishery research and management needs.

Project number: 3-IJ-30

Purpose: To review current management measures identified in the Interstate Management Plan for Weakfish. Activities will include data collection and review of current weakfish research. Data gathered will assist both State and Federal fisheries managers to ensure development and implementation of sound management practices on this important resource.

Contact: John F. McClain
Agency: Division of Fish, Game and Wildlife
Status: 3 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: **$**	0	Federal:	38,948
State:	0	State:	12,983

Publications: none
****

NEW YORK

ANADROMOUS FISH CONSERVATION ACT

Project Description: A Study of the striped bass in the marine district of New York State

Project number: AFC-14 (Sections 4 & 7)

Purpose: Continue collection of bio-characteristics data of New York's striped bass population through sampling of coastal and recreational catch, and assess striped bass spawning success in the Hudson River to provide indices of year class strength.

Contact: Byron Young
Agency: Division of Marine Resources
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	230,000	Federal:	919,200
State:	25,556	State:	102,135

Publications: McKown and Young, 1989.
****

Project Description: Spawning stocks of Hudson River striped bass.

Project number: AFC-15 (Section 7)

Purpose: To ascertain and monitor the movements, distribution, and harvest of striped bass through a tagging survey conducted in the Hudson River estuary. This study will provide information necessary to determine striped bass exploitation rates for interstate resource management purposes.

Contact: Anthony J. Bonavist
Agency: Bureau of Fisheries
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	30,000
State:	0	State:	3,333

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: American lobster investigations in New York waters.

Project number: 3-IJ-11

Purpose: Determine through sampling, tagging activities, the biological population parameters and movements of American lobsters in Long Island Sound. Data collected will be used to support the management of this interjurisdictional resource.

Contact: Phillip T. Briggs
Agency: Division of Marine Resources
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: $	54,763	Federal:	160,580
State:	18,255	State:	17,842

Publications: none
****

OHIO

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Determination of PCB contaminant levels in Lake Erie's commercial fish species.

Project number: 3-IJ-21

Purpose: Determine PCB concentrations in channel catfish commercially harvested from the Ohio waters of Lake Erie. Data gathered will identify possible relationships between PCB levels in carp and yellow perch by size, age, and geographical location.

Contact: Kenneth Paxton

Agency: Department of Natural Resources
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: $	19,185	Federal:	37,925
State:	6,395	State:	12,642

Publications: none

****

PENNSYLVANIA

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project Description: Assessment of yellow perch in Pennsylvania waters of lake Erie.

Project number: 3-397-R

Purpose: Predict numbers of yellow perch annually recruiting to the Lake Erie fishery and estimate optimum fishing mortality/corresponding yield per recruit to enable determination of appropriate management strategies.

Contact: R. B. Kenyon
Agency: Pennsylvania Fish Commission
Status: 4 year project (Completed)
Date Initiated: 1985

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	432,951
State:	0	State:	144,317

Publications: none

****

RHODE ISLAND

ANADROMOUS FISH CONSERVATION ACT

Project Description: Striped bass stock assessment in Rhode Island waters.

Project number: AFC-4 (Section 7)

Purpose: Characterize the composition of Rhode Island striped bass commercial landings to help assess the current status of coastal stocks and determine the level of exploitation by various fisheries.

Contact: John O'Brien
Agency: Division of Fish and Wildlife
Status: 8 year project
Date Initiated: 1981

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	20,000	Federal:	327,800
State:	2,222	State:	67,531

Publications: Berlinsky, 1989.

****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Interjurisdictional fisheries enforcement.

Project number: 3-IJ-31

Purpose: Conduct cooperative enforcement activities designed to support the management of selected interjurisdictional marine species in the Exclusive Economic Zone and state territorial waters. Investigative activities will include land, sea, and air patrols to monitor the commercial and recreational harvesting and landing of striped bass, tuna and surf clam in addition to other eligible interjurisdictional species in support of state/federal resource management objectives.

Contact: Ernest Wilkinson
Agency: Division of Fish and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	25,000	Federal:	75,000
State:	0	State:	0

Publications: none
****

Project Description: Interjurisdictional fisheries management support program.

Project number: 3-IJ-32

Purpose: Provide research and administrative support to the State to facilitate development and evaluation of interjurisdictional fisheries management measures. Research activities will include assessment of gear methodology, legal size limits, and seasonal geographical harvest restrictions for Rhode Island groundfish, striped bass, and lobster fisheries.

Contact: Richard Sisson
Agency: Division of Fish and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	41,085	Federal:	271,800
State:	13,694	State:	30,200

Publications: none
****

Project Description: Coastal fishery resource assessment

Project number: 3-IJ-35

Purpose: Conduct a seasonal bottom trawl survey for the collection of fishery statistical data. Information gathered will augment previous resource assessment surveys and aid in the continued development of minimum biomass estimates for major commercial species by the state and NMFS stock assessment scientists. The estimates will aid in the intelligent management of the resources throughout their range.

Contact: Timothy R. Lynch
Agency: Division of Fish and Wildlife
Status: 2 year project
Date Initiated: 1989

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	37,548	Federal:	120,370
State:	12,516	State:	53,818

Publications: none

****

VERMONT

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Survival and growth of Atlantic salmon fry stocked in varying densities in the White River, Vermont.

Project number: 3-IJ-19

Purpose: Determine first year survival and growth of Atlantic salmon fry stock in varying densities in Vermont waters. The areas will be periodically sampled to determine population size and growth of the stocked salmon. Information gathered will assist fishery managers in evaluating the effectiveness of the fry stocking program and provide needed data on optimum densities necessary to maximize Atlantic salmon production.

Contact: George W. LaBar
Agency: Department of Fish and Wildlife
Status: 2 years project
Date Initiated: 1989

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: $	19,185	Federal:	39,000
State:	2,132	State:	3,900

Publications: none

****

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

VIRGINIA

Project Description: Fisheries resource statistics and information systems.

Project number: 3-428-D

Purpose: To collect, compile and process catch data information pertaining to Virginia's commercial fisheries landings. Data gathered will focus on 1) area fished, 2) gear used, 3) species caught, 4) dockside value, and 5) landing location. Effort statistics will be collected from harvesters, seafood dealers, and processors. Analysis of this data will provide information necessary for developing fishery management plans.

Contact: Lyle M. Varnell
Agency: Marine Resources Commission
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	0	Federal:	147,700
State:	0	State:	49,233

Publications: none

****

ANADROMOUS FISH CONSERVATION ACT

Project Description: Striped bass research in Virginia.

Project number: AFC-18 (Section 7)

Purpose: Monitor the abundance of young-of-the-year striped bass in selected river systems and examine relationships between juvenile abundance and environmental variables. These data will augment existing data from previous surveys and contribute to interstate fisheries management.

Contact: Joseph B. Loesch
Agency: Virginia Institute of Marine Science
Status: 4 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	60,000	Federal:	359,568
State:	20,929	State:	120,678

Publications: none
****

Project Description: A mark and recapture study of striped bass in the James River, Virginia.

Project number: AFC-19 (Section 7)

Purpose: To tag and release striped bass in the James River to evaluate migratory behavior and exploitation rates in coastal fisheries.

Contact: Joseph B. Loesch
Agency: Virginia Institute of Marine Science
Status: 3 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	50,000	Federal:	265,000
State:	14,609	State:	66,250

Publications: none
****

Project Description: A study of Alosa stock composition and year class strength in Virginia.

Project number: AFC-20
Purpose: Collect harvest and biological data for analysis of alosid (alewife, American shad, and blueback herring) populations in Virginia coastal waters and evaluate annual relative abundance, growth, and mortality of juvenile alosid stocks.

Contact: Joseph B. Loesch
Agency: Virginia Institute of Marine Science
Status: 3 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	48,000	Federal:	223,000
State:	48,000	State:	223,000

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Commercial fisheries statistics and information systems.

Project number: 3-IJ-24

Purpose: Collect, process, analyze, and disseminate Virginia's commercial and recreational interjurisdictional fisheries catch/effort data in support of fishery management activities. Analysis of this data will provide information necessary for determining effects of fishery management decision and developing appropriate management strategies.

Contact: Lyle M. Varnell
Agency: Marine Resources Commission
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal:	170,650
State:	0	State:	56,883

Publications: none
****

Project Description: The assessment of commercial fishing effort in Virginia.

Project number: 3-IJ-25

Purpose: Collect fishing effort data for pound nets and gillnets in Virginia's James, York, and Rappahannock River commercial fisheries. Study results will provide information needed for the formulation of rational State management strategies for striped bass and shad/river herring. The project also directly addresses research concerns stated in the interstate management plans for these species.

Contact: Joseph B. Loesch
Agency: Marine Resources Commission
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal:	26,600
State:	0	State:	6,868

Publications: none
****

Project Description: Stock assessment information system for interjurisdictional fishery species.

Project number: 3-IJ-26

Purpose: Determine through biological sampling the population parameters of selected interjurisdictional fish species. Analysis of this data will provide information necessary for determining effect of fishery management decisions and developing appropriate management strategies.

Contact: Robert W. O'Reilly
Agency: Marine Resources Commission
Status: 1 year project (Completed)
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal:	27,630
State:	0	State:	9,210

Publications: none

****

Project Description: The Assessment of commercial fishing effort in Virginia

Project number: 3-IJ-37

Purpose: Collect fishing effort data for pound nets and gillnets in Virginia's James, York, Rappahannock, and Potomac River commercial fisheries. Study results will provide information needed for the formulation of rationale state management strategies for striped bass and shad/river herring. The project will also address management concerns stated in the interstate management plan for these species.

Contact: Joseph B. Loesch
Agency: Marine Resources Commission
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 36,474	Federal:	36,474
State:	12,162	State:	12,162

Publications: none
****

Project Description: Commercial fisheries statistics information systems

Project number: 3-IJ-38

Purpose: Collect, process, analyze, and disseminate Virginia's commercial and recreational interjurisdictional fisheries catch/effort data in support of fishery management activities. Analysis of this data will provide information necessary for determining effects of fishery management decisions and developing appropriate management strategies.

Contact: Lyle M. Varnell
Agency: Marine Resources Commission
Status: 1 year project
Date Initiated: 1990

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 193,746	Federal:	193,746
State:	64,578	State:	64,578

Publications: none
****

WEST VIRGINIA

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Ohio River commercial fisheries map database.

Project number: 3-IJ-18

Purpose: Implement a computer map database which will utilize both biological and environmental fisheries research information affecting the West Virginia portion of the Ohio River. Project activities will focus on incorporating important riverine features with known concentrations of fish for multi-agency analyses of Ohio River fisheries management concerns.

Contact: Larry A. Nielsen
Agency: Department of Natural Resources
Status: 1 year project (Completed)

Federal:	$ 0	Federal:	18,740
State:	0	State:	9,996

Publications: Scott, 1989.
****

Project Description: Ohio River Fisheries Information System

Project number: 3-IJ-36

Purpose: Collect, analyze, and enter diverse biological and environmental fisheries research information into a computerized map database which affects the West Virginia portion of the Ohio River. Project activities will focus on the input of such data and refining the associated output (e.g., reports in the form of tables, graphs, and maps correlating important riverine features which know concentrations of fish) for multi-agency analyses of Ohio River fisheries management concerns.

Contact: M. Delbert Lobb
Agency: Department of Natural Resources
Status: 2 year project
Date Initiated: 1990

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	19,185	Federal:	19,185
State:	6,395	State:	6,395

Publications:
****

WISCONSIN

ANADROMOUS FISH CONSERVATION ACT

Project Description: Assessment of alewife and rainbow smelt populations and the trawl fishery in Lake Michigan.

Project number: AFC-17

Purpose: To develop and conduct an acoustic sampling program to assess the abundance of alewives and rainbow smelt in the Wisconsin waters of Lake Michigan and Green Bay. Data will be collected with echo sounders and recorded digitally on video cassette. The trawl fishery will be monitored to determine the total harvest and effort expended in the commercial fishery for these species.

Contact: Mark Holey
Agency: Department of Natural Resources
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	45,000	Federal:	134,700
State:	45,000	State:	134,700

Publications: none
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Great Lakes commercial statistics information system.

Project number: 3-IJ-23

Purpose: To improve, through centralization of all license and permit activities, current collection, compilation, and analysis methods of harvest data for the sport and commercial fisheries conducted within Lake Michigan and Lake Superior. These activities will enable the streamlining of commercial catch reporting and licensing systems for implementation of limited entry and quota harvest regulations that Wisconsin utilizes to accurately manage their commercial fisheries within the Great Lakes.

Contact: Mark Holey
Agency: Department of Natural Resources
Status: 4 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal:	38,370	Federal:	151,575
State:	12,790	State:	50,525

Publications: none
****

SOUTHEAST REGION

There is a great diversity of fishery resources within the Southeast Region which includes 17 states, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands.. Information on the fiscal year 1989 federally funded projects is available from:

National Marine Fisheries Service
Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, Florida 33702

Andrew J. Kemmerer, Regional Director
Donald R. Ekberg, Grant-In-Aid Coordinator
Telephone (813) 893-3720

States:

Alabama	Louisiana	Puerto Rico
Arkansas	Mississippi	South Carolina
Florida	Missouri	Tennessee
Georgia	Nebraska	Texas
Iowa	New Mexico	Virgin Islands
Kansas	North Carolina	
Kentucky	Oklahoma	

HIGHLIGHTS OF THE SOUTHEAST REGION GRANT ACTIVITIES

The Southeast Region is one of the greatest producers of recreational and commercial fisheries in the nation. The climate, tourism and access provide recreational anglers with a harvest of about 40 percent of the region's edible fish.

In 1989, the states received $1.5 million of Interjurisdictional Fisheries grants (Title III of PL 99-659) and $131,000 in Anadromous Fisheries Conservation (PL 89-304) grants to support the conservation and management of marine and estuarine fishery resources. The Gulf States Marine Fisheries Commission also received $110,000 in Interjurisdictional Fisheries grants to develop fishery management plans for interjurisdictional fisheries.

Anadromous fish projects facilitated the management of several important species in the Gulf of Mexico and the South Atlantic. Auburn University, Louisiana, Mississippi and Texas continued projects to facilitate the restoration of striped bass in the Northern and Western Gulf of Mexico. In the South Atlantic, the state of Georgia assessed the Atlantic sturgeon fisheries in the Altamaha, Ogeechee, Savannah, Satilla and St. Marys river systems. North Carolina determined the life history, particularly migration patterns, for American shad and continued to monitor other anadromous alosids. South Carolina accumulated a data base to support the American shad management program by monitoring commercial catch/effort and determining riverine exploitation rates.

The coastal states conducted a variety of Interjurisdictional Fisheries programs designed to facilitate the conservation and management of fisheries that are valuable for both commercial and recreation fishery interests. In the Caribbean, Puerto Rico continued to determine the commercial harvest and collect important biological data on all species of fish. The U.S. Virgin Islands continued to determine the species composition, abundance, distribution and commercial value of baitfish and assess the mortality of reef fish caught in fish traps.

The South Atlantic states continued to monitor finfish and shellfish to support management of both inshore and offshore species. The State of Georgia monitored panaeid shrimp and blue crab population status, seasonal abundance, size composition and reproductive success. South Carolina tagged and released black sea bass to determine the amount of emigration to reefs and the level of exploitation in inshore areas. South Carolina also supported the cooperative NMFS/State Trip Interview (TIP) data collection program that is used by all fishery

resource management agencies. North Carolina began a finfish assessment project to monitor biological parameters of fishes harvested in the long haul seine, sciaenid pound net, winter trawl, sink net, reef fish, coastal pelagics and flounder pound net fisheries.

The Gulf States supported interjurisdictional fisheries management by conducting research programs for many important finfish and shellfish fisheries. The state of Florida continued its comprehensive marine research program for fisheries identification and population dynamics of life histories of stone and blue crabs, adult red drum and clams. Alabama assessed the length/frequencies of such important interjurisdictional fisheries as Spanish and king mackerel, red drum, and snapper/grouper reeffish. Mississippi and Alabama entered into a cooperative state/federal law enforcement program for state enforcement of fishery regulations established under the Magnuson Fisheries Conservation and Management Act. Mississippi also continued the multiyear data base program on shrimp, blue crab, finfish and oysters. The state of Louisiana collected information for their database on shrimp, groundfish, crab and oyster resources. Texas monitored shellfish resources to support their management in Texas' coastal waters.

The Gulf States Marine Fisheries Commission interjurisdictional fisheries project developed interjurisdictional fisheries management plans for the Gulf of Mexico. This program facilitates interjurisdictional fisheries conservation and management by assisting partners to identify fisheries for regional plan development and to complete the planning process.

For more information on individual projects for each state in the Southeast Region, the states may be contacted directly. A list of state fisheries agencies follows the program analyses section.

PROJECT DESCRIPTIONS

The following is a description of the projects that were initiated, completed and ongoing in the Southeast. The projects that end in an **R or D** refer to the Commercial Fisheries Research and Development Act and are for "R"esearch or "D"evelopment. Those projects that are listed with an "**AFC**" prefix are funded under the Anadromous Fish Conservation Act. Those projects with **IJ** are funded under the Interjurisdictional Fisheries Act. All projects are alphabetically listed by state. All projects within a state list the 88-309 projects, then the 89-304, and then the 99-659 projects. The number in following the AFC and IJ codes refers to the number of projects that have been approved in that region under that particular program, for 88-309 projects it is the number before the R or D designation. For instance, 2-IJ-8 means that it is the eighth project approved under the Interjurisdictional Fisheries Act in the Southeast Region, the "2" is the designation for the Southeast Region. Each region has a different designation.

ALABAMA

ANADROMOUS FISH CONSERVATION ACT

Project: Nutrition studies for increasing production of striped bass fingerlings.

Project number: AFC-31

Purpose: Extract and identify the factor(s) in brine shrimp nauplii responsible for growth of striped bass larvae.

Contact: R. T. Lovell
Agency: Auburn University
Status: 5 year project
Date Initiated: 1986

Current Year Segment Cost:		**Total Cost over life of project**	
Federal: $	12,390	Federal $	76,500
State:	12,390	State:	76,500

Publications: Webster, 1989
****

INTERJURISDICTIONAL FISHERIES ACT

INTERJURISDICTIONAL FISHERIES ACT

Project: Research, management, and enforcement of Alabama Interjurisdictional fisheries.

Project number: 2-IJ-1

Purpose: Monitor the abundance of larval, post larval, juvenile and adult shrimp, fish, crabs, and oysters in Alabama waters and recommend harvest regulations.

Contact: Walter M. Tatum
Agency: Department of Conservation and Natural Resources
Status: 2nd year
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	54,607	Federal:	54,607
State:	9,869	State:	9,869

Publications: none

****

FLORIDA

Project: Florida's Interjurisdictional Marine Fisheries Research Programs.

Project number: 2-IJ-2

Purpose: Studies will include fisheries stock identification, population genetics, population dynamics, life histories and reproduction of the stone crab, blue crab, sea trout and red drum.

Contact: Karen Steidinger
Agency: Department of Natural Resources
Status: 2nd year
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: $	230,220	Federal: $	230,220
State:	76,740	State:	76,740

Publications: none

****

GEORGIA

Project: Assessment of Georgia's marine fisheries resources.

Project number: 2-IJ-4

Purpose: Monitor penaeid shrimp and blue crab populations in Georgia estuaries for shellfish management decisions. Increase data base knowledge of selected aspects of life histories of Georgia's major coastal finfishes and shellfish. Determine movement and growth of commercially important penaeid shrimp in estuarine and coastal marine waters.

Contact: James L. Music
Agency: Department of Natural Resources
Status: 2nd year
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal:	$ 38,370	Federal:	38,370
State:	12,790	State:	12,790

Publications: none
****

ANADROMOUS FISH CONSERVATION ACT

Project: Assessment and biotelemetry studies of Atlantic Sturgeon in Georgia.

Project number: AFC-29

Purpose: Determine the population structure of the commercial sturgeon fishery including age data, sex ratios, length frequencies, and size at maturity. Conduct a biotelemetry study on Atlantic sturgeon to determine movement and migration patterns. Determine spawning migration, residence times, daily and season movements.

Contact: James L. Music
Agency: Department of Natural Resources
Status: 1 year project
Date Initiated: 1985
Total cost:
Federal: $ 18,000
State: 18,000

Publications: none
****

GULF STATES MARINE FISHERIES COMMISSION
INTERJURISDICTIONAL FISHERIES ACT

Project: A project to develop Interjurisdictional Fisheries Management Plans.

Project number: 2-IJ-8

Purpose: Identify and prioritize fisheries for regional plan development, organize task forces, employ consultants, accumulate and analyze data. Arrange for all meetings and perform all necessary duties to administer program activities.

Contact: Larry Simpson
Agency: Gulf States Marine Fisheries Commission
Status: 1 year project
Date Initiated: 1988
Current Year Segment Cost:
Federal: $ 110,000
State 0

Publications: Christmas, Etzold, Simpson, and Meyers, 1988.
****

LOUISIANA

Project: Enhancement of oyster seed production on Louisiana's Public Reefs.

Project number: 2-IJ-10 [Section 308(b)]

Purpose: Plant approximately 45,000 cubic yards of clamshell on 900 acres of public oyster reefs in selected areas.

Contact: Ronald Dugas
Agency: Department of Wildlife and Fisheries
Status: 1st year
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project**	
Federal:	$ 742,400	Federal:	$ 742,400
State	0	State:	0

Publications: none
****

Project: Interjurisdictional Assessment and management of Louisiana's coastal fisheries.

Project number: 2-IJ-14

Purpose: To maintain a coastwise program which monitors relevant parameters of economically important seafood resources.

Contact: Claude Boudreaux
Agency: Department of Wildlife and Fisheries
Status: 1 year project
Date Initiated: 1988
Total Cost:
Federal: 230,220
State: 76,740

Publications: none
****

MISSISSIPPI

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project: Evaluation of Methods to Depurate Oysters (Crassostrea virginica)

Project number: 2-435-R-1

Purpose: To develop on-shore and off-shore processes and procedures to depurate or cleanse these oysters so that they can be marketed and consumed.

Contact: Cornell Ladner
Agency: Mississippi Department of Wildlife Conservation
Status: Extended to 7/31/91
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project**	
Federal:	$ 101,695	Federal:	$ 101,695
State:	33,899	State:	33,899

Publications: None
****

ANADROMOUS FISH CONSERVATION ACT

Project: Mississippi/Alabama cooperative striped bass restoration program.

Project number: AFC-30

Purpose: Restore the striped bass population in the Gulf of Mexico coastal area of the states of Alabama and Mississippi by annual stocking of advanced striped bass fingerlings.

Contact: Larry Nicholson
Agency: Department of Wildlife Conservation
Status: 4 year project
Date Initiated: 1985

Current Year Segment Cost:		**Total cost over life of project:**	
Federal:	$ 20,000	Federal:	$ 91,500
State:	2,222	State:	45,750

Publications: none

****

INTERJURISDICTIONAL FISHERIES ACT

Project: Mississippi Gulf Coast fisheries monitoring and assessment program.

Project number: 2-IJ-3

Purpose: To: 1) assess finfish stocks in Mississippi Sound and adjacent waters with emphasis on spotted seatrout, red drum, and striped mullet; 2) collect and analyze data on the condition of oyster reefs to determine numbers of live oysters, marketable oysters, number of spawnable oysters, incidence of diseases and predators, and 3) monitor white and brown shrimp postlarvae, 4) assess blue crab stocks.

Contact: Thomas McIlwain
Agency: Department of Wildlife Conservation/Gulf Coast Research Laboratory
Status: 1 year project
Date Initiated: 1989
Current Year Segment Cost:
Federal: $ 180,702
State/GCRL:60,234

Publications: Overstreet, Thulin, Koie, Deardorff, Stone, Heard - 1989

****

Project: Mississippi Interjurisdictional Marine Enforcement

Project number: 2-IJ-25

Purpose: Provide cooperative law enforcement services between NMFS, Coast Guard, State of MS Dept. Wildlife, Fisheries and Parks.

Contact: Jerry Gollott
Agency: Department of Wildlife Conservation
Status: 1 year
Date Initiated: 1989

Current Year Segment Cost:
Federal: $ 25,000
State: 0

Publications: none
****

NORTH CAROLINA

INTERJURISDICTIONAL FISHERIES ACT

Project: North Carolina commercial finfish assessment.

Project number: 2-IJ-16

Purpose: Collect, analyze and report information on North Carolina finfish operations for use in management of the fisheries and preparation and implementation of state and interjurisdictional management plans for the fisheries involved.

Contact: Mike Street, Jeffrey Ross, and David Moye.
Agency: Department of Environment, Health & Natural Resources
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total cost over life of project:**	
Federal: $	124,296	Federal: $	274,209
State:	41,432	State:	47,679

Publications: none
****

ANADROMOUS FISH CONSERVATION ACT

Project: North Carolina Alosid management project.

Project number: AFC-36

Purpose: Determine the relative abundance, growth and distribution of juvenile alosid species. Assess river herring and shad stocks.

Contact: Sara Winslow
Agency: Department of Environment, Health & Natural Resources
Status: 3 year project
Date Initiated: 1989
Current Year Segment Cost:
Federal: $ 24,000
State: 24,000

Publications: none
****

Project: American Shad Migration Study.

Project number: AFC-35

Purpose: Determine the life history aspects of American shad in North Carolina ocean waters, migration patterns and utilization by various fisheries.

Contact: Jerry A. Parker
Agency: Department of Environment, Health & Natural Resources
Status: 1 year project
Date Initiated: 1988
Current Year Segment Cost:
Federal: $ 9,478
State: 9,478

Publications: none
****

PUERTO RICO

INTERJURISDICTIONAL FISHERIES ACT

Project: Puerto Rico/NMFS Interjurisdictional Fisheries Program.

Project number: 2-IJ-12

Purpose: Provide an efficient and reliable mechanism for recording landings of commercial fishermen, biostatistical and effort data and update census data of the island's commercial fishermen.

Contact: Graciela Garcia-Moliner
Agency: Marine Resources Development Corporation
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total cost over life of project:**	
Federal: $	120,280	Federal: $	267,503
State:	40,093	State:	73,274

Publications: none
****

SOUTH CAROLINA

Project: Incidental Finfish catch by South Carolina Shrimp Trawlers.

Project number: 2-IJ-15

Purpose: Document season catch rates of major fish groups by net/TED. Define species composition and biostatistical data by gear category.

Contact: R.A. Law and G.F. Ulrich
Agency: Wildlife and Marine Resources Department
Status: 1 year project
Date Initiated: 1988
Total Cost:
Federal: $ 22,065
State: 7,355

Publications: none
****

ANADROMOUS FISH CONSERVATION ACT

Project: Investigation of American shad commercial fishing in South Carolina.

Project number: AFC-37

Purpose: Sample catch/effort of shad fishery. Determination of riverine exploitation rates for American shad.

Contact: Glenn Ulrich
Agency: Wildlife and Marine Resources Department
Status: 1 year project
Date Initiated: 1989
Current Year Segment Cost:
Federal: $ 35,000
State: 35,000

Publications: none
****

TEXAS

INTERJURISDICTIONAL FISHERIES ACT

Project: Interjurisdictional-Texas commercial fisheries management program.

Project number: 2-IJ-13

Purpose: Monitor trends in brown shrimp, white shrimp, pink shrimp, blue crab and Eastern oysters relative abundance and size. Population status to be used to determine management regulations.

Contact: Gary Matlock
Agency: Texas Parks & Wildlife Conservation
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total cost over life of project**	
Federal: $	226,500	Federal: $	451,380
State:	75,500	State:	150,433

Publications: none
****

ANADROMOUS FISH CONSERVATION ACT

Project: Evaluation of physico-chemical characteristics for striped bass stocking

Project number: AFC-38

Purpose: Determine through develop of a model when and where striped bass can be stocked to maximize chances for survival and establishing populations.

Contact: Gary Matlock
Agency: Texas Parks & Wildlife Conservation
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:
Federal: $ 11,000
State: 11,000

Publications: none

****

VIRGIN ISLANDS

INTERJURISDICTIONAL FISHERIES ACT

Project: Virgin Islands fisheries research and assessment for interjurisdictional species.

Project number: 2-IJ-11

Purpose: Study baitfish to determine seasonality, species composition, abundance, distribution and commercial value to achieve optimum sustained use of this resource. Determine lunar effects and trap shading on fish trap catch mortality.

Contact: James Beets
Agency: Department of Planning & Natural Resources
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life project**	
Federal: $	19,185	Federal: $	36,633
State:	0	State:	6,247

Publications: none

****

NORTHWEST REGION

The Northwest Region encompasses nine states; two coastal states and seven inland states, as listed below. In addition, the Pacific States Marine Fisheries Commission and the Pacific Fishery Management Council are located in the Northwest, and the Region administers the grants to these entities also. The majority of the appropriated grant funds in the Northwest support projects by the coastal states that are vital to Federal management of salmon and groundfish. Currently, only one of the inland states, Idaho, qualifies for Federal funding under NMFS grant programs. Information on the fiscal year 1989 federally funded projects is available from:

National Marine Fisheries Service
Northwest Regional Office
7600 Sand Point Way N.E.
Seattle, WA 98115

Rolland A. Schmitten, Regional Director
Joe Scordino, Fisheries Management Division
Telephone (206) 526-6140

States:

Colorado	**South Dakota**
Idaho	**Utah**
Montana	**Washington**
North Dakota	**Wyoming**
Oregon	

HIGHLIGHTS OF THE NORTHWEST REGION GRANT ACTIVITIES

In fiscal year 1989, the Northwest Region grant funds continued to be used primarily for projects that support management of fisheries under the Magnuson Act. Most of the Northwest Region's fiscal year 1989 funding under the Interjurisdictional Fisheries Act and the Anadromous Fish Conservation Act were allocated to the coastal states of Washington and Oregon for fisheries monitoring projects in support of the Pacific Fishery Management Council's Fishery Management Plans for salmon and groundfish.

All of the fiscal year 1989 Anadromous Fish Conservation Act (P.L. 89-304) funding totalling $1,045,000 for the Northwest Region were used in projects that directly support management of salmon under the Council's Fishery Management Plan (FMP) and the U.S./Canada Pacific Salmon Treaty. Historically, the Pacific salmon fishery is the most valuable and most controversial fishery in the Northwest. Problems within the fishery are a result of dwindling stocks, a highly mobile and overcapitalized commercial fishing fleet, increasing recreational interest, obligations to treaty Indian tribes, obligations under the U.S./Canada Pacific Salmon Treaty, and the necessary interaction of a myriad of affected state, federal and tribal management entities. The ocean salmon fishery has been regulated and coordinated under the Council's FMP since 1978. Management of mixed stocks, some of which are depressed, requires continuous data collection, analysis, and monitoring of the catch coastwide to meet escapement and allocation goals. P.L. 89-304 funding has been essential for projects that collect and analyze fisheries data necessary for management under the Magnuson Act.

The Northwest Region received about $354,000 of fiscal year 1989 Interjurisdictional Fisheries Act (IJ) funds for the states of Washington, Oregon and Idaho. In addition, $110,000 was received for the Pacific States Marine Fisheries Commission. Both Washington and Oregon used the majority of their IJFA funds for groundfish projects that support the Council's Fishery Management Plan for Pacific Coast Groundfish. The coastal states IJ funds also were used to support projects on pink shrimp, Dungeness crab, and steelhead. Idaho used its IJ funding to continue work on the IHNV virus in steelhead. The remainder of the inland states did not use their IJ funds because they did not have qualifying projects on interjurisdictional species The Commission used its IJ funding for development and implementation of interstate plans on thresher shark and Southeast Alaska rockfish.

PROJECT DESCRIPTIONS

The following is a description of the projects that were initiated or ongoing in the Northwest in 1989. The projects listed below are alphabetically arranged by state. Projects include an "AFC" or an "IJ" in their project title to designate whether they are funded under the Anadromous Fish Conservation Act (AFC) or the Interjurisdictional Fisheries Act (IJ). The number following the AFC and the IJ codes refers to the number of projects that have been approved under the program in a particular Region. The number preceding the IJ or AFC denotes the Region in which the project is funded: "1" denotes the Northwest Region. For example, project number "1-IJ-6" means the sixth project approved under the Interjurisdictional Fisheries Act (IJ) in the Northwest Region.

IDAHO

INTERJURISDICTIONAL FISHERIES ACT

Project: Occurrence and Quality of Infectious Hematopoietic Virus in the North Fork Clearwater River.

Project Number 1-IJ-8

Purpose: Develop an improved understanding of potential sources and transmission of infectious hematopoietic virus (IHNV) in juvenile steelhead.

Contact: Virgil Moore
Agency: Idaho Department of Fish and Game
Status: 2 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	18,912	Federal: $	36,537
State:	6,324	State:	12,199

Publications: Congleton and Zhang, 1989.

****

OREGON

INTERJURISDICTIONAL FISHERIES ACT

Project: Columbia Area Groundfish Assessment/Fishery Management Plan Support.

Project Number 1-IJ-3

Purpose: Collect and analyze fisheries and stock assessment information on west coast groundfish off Oregon as needed for management under the Pacific Fishery Management Council's Fishery Management Plan.

Contact: Robert Demory
Agency: Oregon Department of Fish and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal:$	50,738	Federal: $	148,933
State:	16,913	State:	49,645

Publications: PFMC, 1989; Barss and Demory, 1989.

****

Project: Shrimp Resource Assessment

Project Number 1-IJ-4

Purpose: Collect fishery and biological data on pink shrimp needed to manage the commercial fishery off Oregon in coordination with other coastal states.

Contact: Robert Hannah
Agency: Oregon Department of Fish and Wildlife
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: **$**	50,738	Federal: **$**	169,034
State:	16,913	State:	56,345

Publications: Hannah and Jones, 1990; ODFW, 1990.
****

ANADROMOUS FISH CONSERVATION ACT

Project: Joint Oregon-Washington multijurisdictional salmon management program.

Project Number: AFC-134

Purpose: Obtain information necessary for salmon management under the Pacific Fishery Management Council's Fishery Management Plan. This joint project with Washington consists of three tasks which: 1) monitor the commercial and recreational ocean salmon fisheries in Oregon; 2) apply, recover and decode coded wire tags; and 3) assess stock abundance and distribution.

Contact: Rodney Kaiser, Emory Wagner, and Bob Garrison
Agency: Oregon Department of Fish and Wildlife
Status: 5 year project
Date Initiated: 1989

Current Year Segment Cost:		**Projected Cost over life of project:**	
Federal: **$**	488,750	Federal: **$**	3,002,000
State:	244,375	State:	1,501,000

Publications: PFMC, 1990.
****

PACIFIC STATES MARINE FISHERIES COMMISSION
INTERJURISDICTIONAL FISHERIES ACT

Project: Investigation and management of the Pacific Coast Thresher Shark Fishery

Project Number 1-IJ-1

Purpose: Develop and implement an interstate fishery management plan for thresher shark off Washington, Oregon, and California.

Contact: David Hanson
Agency: Pacific States Marine Fisheries Commission
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	26,816	Federal: $	113,649
State:	0	State:	0

Publications: PSMFC, 1989a.
****

Project: Southeast Alaska Rockfish Plan Development.

Project Number 1-IJ-2

Purpose: Prepare a draft fishery management plan for Southeast Alaska rockfish, conduct hearings to obtain public input, and prepare draft regulations to implement the plan.

Contact: John Harville
Agency: Pacific States Marine Fisheries Commission
Status: 3 year project
Date Initiated: 1988

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	26,184	Federal: $	48,684
State:	0	State:	0

Publications: PSMFC, 1989b.
****

Project: Interjurisdictional Fisheries Management Plan Coordination and Development

Project Number 1-IJ-9

Purpose: Coordinate the development and monitoring of interstate fishery management plans on various west coast interjurisdictional fish species.

Contact: Guy Thornburgh
Agency: Pacific States Marine Fisheries Commission
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	57,000	Federal: $	500,000
State:	0	State:	0

Publications: None.
****

ANADROMOUS FISH CONSERVATION ACT

Project: Regional Mark Processing Center for coded-wire tags and fin marks.

Project Number AFC-132

Purpose: Maintain a readily accessible coastwide database for identification of coded-wire tagged salmon stocks released and recovered off the west coast of Washington, Oregon, California, Alaska and Canada.

Contact: J. Kenneth Johnson
Agency: Pacific States Marine Fisheries Commission
Status: 5 year project
Date Initiated: 1989

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	67,500	Federal: $	337,500
State:	33,750	State:	168,750

Publications: Johnson and Thompson, 1989; Johnson, 1989; Johnson, 1990a; Johnson, 1990b.
****

WASHINGTON

INTERJURISDICTIONAL FISHERIES ACT

Project: Coastal groundfish monitoring, management and stock assessment.

Project Number 1-IJ-5

Purpose: Collect and analyze fisheries and stock assessment information on west coast groundfish off Washington as needed for management under the Pacific Fishery Management Council's Fishery Management Plan.

Contact: Jack Tagart and Alan Millikan
Agency: Washington Department of Fisheries
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	101,010	Federal: $	704,077
State:	11,223	State:	166,563

Publications: Jagielo, 1990a; Jagielo, 1990b; PFMC, 1989; Rackowski et al., 1989.
****

Project: Coastal pink shrimp study.

Project Number 1-IJ-6

Purpose: Collect fishery and biological data on pink shrimp needed to manage the commercial fishery off Washington in coordination with other coastal states.

Contact: Michael Gross
Agency: Washington Department of Fisheries
Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	37,372	Federal: $	210,796
State:	12,458	State:	70,266

Publications: None
****

Project: Coastal dungeness crab management.

Project Number 1-IJ-7

Purpose: Collect fishery and biological data on Dungeness crab needed to manage the commercial fishery off Washington in coordination with other coastal states.

Contact: Steve Barry
Agency: Washington Department of Fisheries

Status: 5 year project
Date Initiated: 1988

Current Year Segment Cost:		Projected Cost over life of project:	
Federal: $	37,901	Federal: $	211,895
State:	12,633	State:	70,631

Publications: None
****

ANADROMOUS FISH CONSERVATION ACT

Project: Joint Washington-Oregon multijurisdictional salmon management program.

Project Number AFC-133

Purpose: Obtain information necessary for salmon management under the Pacific Fishery Management Council's Fishery Management Plan. This joint project with Oregon consists of three tasks which: 1) monitor the commercial and recreational ocean salmon fisheries in Washington; 2) apply, recover and decode coded wire tags; and 3) assess stock abundance and distribution.

Contact: Richard Lincoln, Morris Barker, Lee Blankenship, and Jim Shaklee
Agency: Washington Department of Fisheries
Status: 5 year project
Date Initiated: 1989

Current Year Segment Cost:		Total Cost over life of project:	
Federal: $	488,750	Federal: $	4,407,142
State:	244,375	State:	2,203,571

Publications: Busack, C. 1990; Klaybor and Phelps, 1990; Marshall, et al., 1990; Phelps, 1990; PFMC, 1990; Shaklee, 1989; Shaklee, et al., 1990a; Shaklee, et al., 1990b.
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SOUTHWEST REGION

The Southwest Region of the National Marine Fisheries Service includes 4 states and 6 Pacific island areas. The states and territories of the Southwest Region are listed below. Information on the FY 89 federally funded projects is available from:

National Marine Fisheries Service
Southwest Regional Office
300 South Ferry Street
Terminal Island, California 90731

E. Charles Fullerton, Regional Director
James Morgan, Grant-In-Aid Coordinator
Phone: 213-514-6667

States and Territories:

Arizona	Hawaii
California	Nevada
American Samoa	Guam
Commonwealth of the Northern Mariana Islands	Republic of the Marshall Islands
Federated States of Micronesia	Republic of Palua

HIGHLIGHTS OF THE SOUTHWEST REGION GRANT ACTIVITIES

In 1989, the Division of Fish and Wildlife in the Commonwealth of the Northern Mariana Islands began assessing the status of groupers in inshore and offshore waters under the authority of the Interjurisdictional Fisheries Act. These fish are an important component of the hook and line fishery, and are under heavy fishing pressure. To establish appropriate regulations to conserve this resource, a research program was established to compare life history characteristics, reproductive biology, habitat, distribution, diet and relative abundance of the various species. This project not only will provide important information for management, it also will greatly increase knowledge of grouper biology, which is now limited.

Also funded under the Interjurisdictional Fisheries Act is a project in Guam begun in 1989 to develop expertise in the techniques of otolith and mitochondrial DNA analysis among the fishery research personnel of the University of Guam. These techniques will permit greater sampling and aging of many highly pelagic species in the area such as blue marlin and tuna. Proper aging of these fish helps determine growth, production, and stock structure.

Continuing in 1989 was work begun in 1987 under the authority of the Commercial Fisheries Research and Development Act to provide information on the range and amount of spawning habitat of winter-run chinook salmon in the Sacramento River of California. Winter-run chinook was declared a threatened species in 1989 under the Endangered Species Act. Assessing the status of the resource includes tagging juvenile salmon, conducting aerial surveys of spawning areas, and trapping downstream migrants. Rainfall has been below normal in recent years, creating low water flows, warm water, and low numbers of available fish. These conditions have prevented capturing all goals of the project.

PROJECT ANALYSIS

The following is a description of the projects that were initiated, completed and ongoing in the Southwest. the projects that end in an "R" or "D" (Research or Development) refer to the Commercial Fisheries Research and Development Act (P.L. 88-309; no new projects are being funded under this Act, only projects still underway but not completed.) Those projects that are listed with an "IJ" are funded under the Interjurisdictional Fisheries Act (Title III of P.L. 99-659). Those projects listed with and "AFC" prefix are funded under the Anadromous Fish Conservation Act (P.L. 89-304). All projects are alphabetically listed by state. All projects within a state list the 88-309 projects, followed by the 89-304 projects, that the 99-659 projects. The number following the AFC and IJ codes refers to the number of projects that have been approved in that region under that particular program. For 88-309 projects it is the number before the R or D designation. For instance, 4-IJ-4 means that the project is the fourth project approved under the Interjurisdictional Fisheries Act in the Southwest Region, The first "4" in the designation refers to the Southwest Region.

AMERICAN SAMOA

INTERJURISDICTIONAL FISHERIES ACT

Project: Implementation of upgraded information system.

Project Number: 4-IJ-6

Purpose: Replace existing computer hardware and train staff in the use of software to improve the American Samoa data collection system.

Contact: Henry Sesepasara
Agency: Department of Marine and Wildlife Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 76,994	Federal:	$ 76,994
State:	9,260	State:	9,260

Publications: none
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Project: Sea watch Samoa.

Project Number: 4-IJ-10

Purposes: Production of educational videos in Samoan and English on changing Samoan fisheries and the need for conservation.

Contact: Henry Sesepasara
Agency: Department of Marine and Wildlife Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 20,996	Federal:	$ 20,996
State:	0	State:	0

Publications: none
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CALIFORNIA

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project: Southern California commercial fisheries assessment.

Project Number: 4-79-D

Purposes: Monitoring of southern California fishery resources at wholesale fish dealers. assessment of interactions between gill nets and marine mammals. Assessment of harbor porpoise and harbor seal populations.

Contact: Richard Klingbeil
Agency: Department of Fish and Game
Status: 6 year project
Date Initiated: 1986

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal: **$**	492,244
State:	0	State:	164,081

Publications: none
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Project: Marine statistics support program.

Project Number: 4-82-D

Purposes: Provide data processing and data entry support to improve the Pacific Fisheries Information Network.

Contact: Carol Jacobs and Dixie Howell
Agency: Department of Fish and Game
Status: 2 year project
Date Initiated: 1987 (Completed)

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal: **$**	86,311
State:	0	State:	142,864

Publications: none
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Project: Sacramento River chinook study.

Project Number: 4-90-D

Purposes: Assessment of Sacramento River chinook salmon runs.

Contact: Richard Painter and Bill Snider
Agency: Department of Fish and Game
Status: 4 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal: **$**	0	Federal: **$**	99,509
State:	0	State:	33,170

Publications: none
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ANADROMOUS FISH CONSERVATION ACT

Project: Salmon research and management.

Project Number: AFC-21

Purposes: Monitor California salmon landings and assess salmon populations in the Klamath River.

Contact: Paul M. Hubbell
Agency: Department of Fish and Game
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 0	Federal:	$ 375,000
State:	0	State:	375,000

Publications: none
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Project: Salmon and steelhead research, management, and enhancement.

Project Number: AFC-22

Purposes: Monitor California salmon landings and assess salmon and steelhead in the Klamath River.

Contact: Paul M. Hubbell
Agency: Department of Fish and Game
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 346,975	Federal:	$ 346,975
State:	346,975	State:	346,975

Publications: none
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INTERJURISDICTIONAL FISHERIES ACT

Project: Assessment and management of selected California fisheries.

Project Number: 4-IJ-3

Purposes: Dockside sampling of southern California fisheries.

Contact: Eugene Fleming
Agency: Department of Fish and Game
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 0	Federal:	$ 224,880
State:	0	State:	74,960

Publications: none
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Project: Assessment and management of selected California commercial fisheries.

Project Number: 4-IJ-8

Purposes: Dockside sampling of southern California fisheries, fishery independent sampling, and assessment of live bait fishery.

Contact: Eugene Fleming
Agency: Department of Fish and Game
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 230,220	Federal:	$ 230,220
State:	76,740	State:	76,740

Publications: none

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COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
INTERJURISDICTIONAL FISHERIES ACT

Project: Fishery data collection program, 88-89.

Project Number: 4-IJ-2

Purposes: Maintain data collection program and upgrade system to comply with Western Pacific Fisheries Information Network.

Contact: Arnold I. Palacios
Agency: Division of Fish and Wildlife
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 0	Federal:	$ 52,130
State:	0	State:	6,000

Publications: none

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Project: Marianas Fish Biology Program.

Project Number: 4-IJ-7

Purposes: Grouper resource assessment and data maintenance.

Contact: Arnold I. Palacios
Agency: Division of Fish and Wildlife
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 58,785	Federal:	$ 58,785
State:	0	State	0

Publications: none

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GUAM

INTERJURISDICTIONAL FISHERIES ACT

Project: Stock characterization of fishery resources.

Project Number: 4-IJ-1

Purposes: Develop expertise in Guam in the techniques of otolith and mitochondrial DNA analysis to identify interjurisdictional fishery stocks.

Contact: Peter R. Barcinas
Agency: Guam Department of Commerce
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 9,000	Federal:	$ 9,000
State:	0	State:	0

Publications: none

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Project: Data collection and analysis.

Project Number: 4-IJ-5

Purposes: Collect and analyze data from longline and purse seine vessels off-loading their catch in Guam.

Contact: Peter R. Barcinas
Agency: Guam Department of Commerce
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 10,185	Federal:	$ 10,185
State:	0	State:	0

Publications: none

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HAWAII

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project: Hawaii small scale fishing vessel survey.

Project Number: 4-92-D

Purposes: Determine the size of the commercial and recreational harvest of the small vessel fleet.

Contact: Henry M. Sakuda
Agency: Department of Land and Natural Resources
Status: 4 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$113,110	Federal:	$ 113,110
State:	37,708	State:	37,708

Publications: none

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INTERJURISDICTIONAL FISHERIES ACT

Project: Revision of Hawaii's commercial fisheries charts.

Project Number: 4-IJ-4

Purpose: Revise statistical charts to embrace all state and federal fisheries' requirements within three miles and the EEZ.

Contact: Walter Ikahara
Agency: Division of Aquatic Resources
Status: 1 year project
Date Initiated: 1988

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 0	Federal:	$ 29,831
State:	0	State:	9,939

Publications: none

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Project: Revision of Hawaii's Commercial Fisheries Data Reporting System.

Project Number: 4-IJ-11

Purpose: Revise current procedures of collecting, editing, and checking data collected from commercial fishermen.

Contact: Reginald Kokubun
Agency: Division of Aquatic Resources
Status: 1 year project
Date Initiated: 1989

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 38,730	Federal:	$ 38,730
State:	12,800	State:	12,800

Publications: none

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THE REPUBLIC OF THE MARSHALL ISLANDS
COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT ACT

Project: Marshall Islands fishery statistics program.

Project Number: 4-84-D

Purpose: Develop and implement a fishery statistics reporting system in Majuro and Ebeye.

Contact: Steve Muller
Agency: Marine Resource Authority
Status: 2 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	$ 0	Federal:	21,623
State:	0	State:	9,700

Publications: none

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FEDERATED STATES OF MICRONESIA

Project: Regional standardization of catch data.

Project Number: 4-95-D

Purpose: Support fisheries data collection, analysis, and storage on Pohnpei, Truk, Kosrea, and Yap.

Contact: Mike Gawel
Agency: Marine Resource Authority
Status: 2 year project
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	**$** 31,000	Federal:	**$** 31,000
State:	10,333	State:	10,333

Publications: none

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ALASKA REGION

The Alaska Region involves only one state but it includes about 59% (47,300 miles) of the total U.S. marine coastline and 55% (830,000 square miles) of the U. S. continental shelf. The commercial landings of seafood in Alaska by domestic and US-foreign (joint-venture) fisheries amount to 2.5 million metric tons worth about $1.5 billion to the fishermen. In addition, substantial recreational and subsistence fisheries take place throughout Alaska. Thus, the Alaska Region is a fertile area of fisheries resources and has a large need for information on vital fisheries resources. As can be seen below, this region is actively involved in projects using grant-in-aid funds from both the Anadromous Fish Conservation Act and the Interjurisdictional Fisheries Act. Information on the fiscal year 1989 federally funded projects is available from:

National Marine Fisheries Service
Alaska Regional Office
P.O. Box 021668
Juneau, Alaska 99802-1668

Steve Pennoyer, Regional Director
Aven Andersen or Ron Berg
Fisheries Management Division
Telephone: 907 (& FTS)-586-7228

State of Alaska:
Don W. Collinsworth, Commissioner
Alaska Department of Fish and Game
Box 3-2000
Juneau, AK 99802-2000

HIGHLIGHTS OF THE ALASKA REGION GRANT ACTIVITIES

In FY 1989, the Alaska Region received $426,390 under the Anadromous Fish Conservation Act (P.L. 89-304). The Region apportioned $402,800 of this amount to the Alaska Department of Fish and Game (ADF&G) and $23,494 to the University of Washington's Fisheries Research Institute. The Alaska Region received $230,220 under the Interjurisdictional Fisheries Act (P.L. 99-659) and apportioned all of it all to ADF&G. These funds supported research projects directed at the management of Alaska's salmon, herring, and groundfish fisheries.

The Anadromous Fish Act projects included studies on sockeye, pink, chum, coho, and chinook salmon in Southeast Alaska and sockeye and coho salmon at Chignik, Alaska. These salmon projects supported management of fisheries that in 1989 landed over 66 million salmon having an ex-vessel value (amount paid to fishermen) of about $141 million. Data obtained through the coded-wire tag recovery program during port sampling aided in determining migration routes and timing and hatchery contributions of various salmon stocks. Results of all studies were used in part for implementing the Pacific Salmon Treaty. Data were also obtained to determine the numbers of spawning salmon and to support decisions for managing commercial fisheries in Southeast Alaska and at Chignik, Alaska.

Work conducted under the Interjurisdictional Fisheries Act supported management of fisheries for stocks of groundfish and Pacific herring in the Gulf of Alaska. These stocks migrate between Canadian and U.S. waters and between State of Alaska waters and the U.S. Exclusive Economic Zone off the coast of Alaska.

The groundfish fisheries had a total 1988 ex-vessel value of over $160 million, and the 1988 herring fisheries, over $41 million (data for 1989 not available at the time of this report). Groundfish harvests during 1988, where these projects were conducted, totaled about 171,842 metric tons (mt) round weight. The herring catch totaled 27,875 mt. Most of the groundfish harvest was pollock, followed by Pacific halibut, sablefish, Pacific cod, and a number of other species.

Developing fisheries for the other species, particularly rockfish and flounders, created a need for more information on the stocks and harvests. Data obtained through port sampling in 1989 were used to identify rockfish species assemblages and develop harvest guidelines for certain rockfish found in State waters. Winter trawl fisheries for flounder in the State waters of Southeast Alaska require extensive inseason management due to reduced abundance of certain flounder species. Information gained from sampling the harvests when they were landed in ports was used for managing the flounder fisheries and to minimize trawl catches of crab and Pacific halibut. Acoustic surveys of herring stocks in Southeast Alaska were used to establish quotas for managing the commercial harvest of herring. Studies were also conducted to determine the success of spawning and to better understand the life history of herring.

PROJECT DESCRIPTIONS

The following is a description of the projects that were initiated, completed, or are ongoing in Alaska. All projects were conducted in Alaska and are listed by grant, with the Anadromous Fisheries Act projects listed first, followed by the Interjurisdictional Fisheries Act projects.

Each project is assigned a code. The projects that end in an "AFC" prefix are funded under the Anadromous Fish Conservation Act; Those with an "IJ" are funded under the Interjurisdictional Fisheries Act. The number preceding the letter code (5) is the designation for the Alaska Region. The number following the letter code, refers to the number of projects approved in that region under that particular program, for instance, 5-IFA-4 means that is the fourth project approved under the Interjurisdictional Fisheries Act in the Alaska Region.

ANADROMOUS FISH CONSERVATION ACT

Project Description: Southeast Alaska Salmon Studies (5 parts, all parts are included in the costs figures)

Project Number 5-AFC-75

General Purpose -- Index abundance of salmon populations returning to river systems to provide commercial fishery managers information for managing harvests; obtain information on migration routes, run timing, relative abundance, and contribution of key salmon stocks.

Agency: Alaska Department of Fish and Game
Status: 5 year project
Date Initiated: 1986

Current Year Segment Cost:		Total Cost Over Project Life:	
Federal:	$ 402,800	Federal:	$ 1,770,200
State:	415,900	State:	1,783,500

Purpose (Part 1): Southeast Alaska Sockeye Salmon Studies: These studies are aimed at better management of fisheries harvesting sockeye salmon from Southeast Alaska sockeye production areas. These studies focused on counting the number of spawning sockeye salmon and evaluating spawning escapement goals. Since 1976, spawning escapement goals were met or exceeded 12 years at Chilkoot Lake and 7 or 12 years at Chilkat Lake. In 1988, An estimated 81,375 sockeye salmon escaped the fisheries to spawn in Chilkoot Lake, and 27,566 spawned in Chilkat Lake. The Chilkoot escapement was 116% of the middle of the range for the spawning escapement goal, but the Chilkat escapement was only 39% of the midrange. Estimates of the rearing capacity of Chilkoot Lake for sockeye juveniles indicated the optimum spawning escapement should be about 41,000 adults (assuming one male for every female), and for Chilkat lake, 154,000. Spawning escapements to Crescent, Speel, Hugh Smith, and Klawock Lakes and to the Naha and Karta Rivers were below average, whereas spawning escapement to Salmon Bay was above average by 4,022 fish.

Contact: Fred Bergander
Phone: (907) 465-4250

Publications: Bartoo and Koenings, in press; Bergander, 1989a, 1989b; McPherson and Olsen, in press.
****

Purpose (Part 2): Troll Fishery Monitoring and Evaluation: The commercial troll fishery in Southeast Alaska is monitored to allow timely estimation of the harvests during the season. Approximately 10% of the harvest is sampled in various ports throughout Southeast Alaska to determine harvest per fishing day. Aerial surveys are conducted to determine the number of vessels fishing in each area. Regional catches are calculated from this data. In addition, reports of fish sold (fish tickets) are collected from all fish buyers, examined, and entered into a computer database. As the season progresses, the actual harvests are compared to the estimated harvests to determine if additional closings or openings of the fishery are warranted. Part of this effort is used to ensure that the harvest does not exceed the limit on Chinook salmon set by the Pacific Salmon Commission.

Contact: Al Davis
Phone: (907) 747-6688

Publications: Davis and Kelly, 1989.
****

Purpose (Part 3): Southeast Alaska Harvest Sampling: This project involved collecting biological data and fishery performance information from major ports of landings in Southeast Alaska and Yakutat. The information is used by NMFS, the Alaska Department of Fish and Game, the Pacific Salmon Commission, and private agencies in a variety of management and research applications. All of ADF&G's Southeast Alaska port sampling activities associated with the recovery of coded-wire tags, troll fishery performance data, sampling harvested chinook, coho, pink, and chum salmon for scales, age, sex, and size were unified under this project. It complements a similar program for sockeye salmon sponsored by the Pacific Salmon Treaty Act.

Contact: Glen T. Oliver
Phone: (907) 465-4210

Publicatons: Dangle (in prep); McPherson, Olsen, and Rowse (in press); Oliver, 1989; Pahlke (in prep); Rowse (in prep); and Wood (in prep).
****

Purpose (Part 4): Southeast Alaska Pink and Chum Salmon Studies: The pink and chum salmon studies focus on forecasting future runs of pink and chum salmon. For the period of this project, they involved (a) multiple linear regression analysis using spawning escapement and environmental data to make the forecasts, (b) monitoring pink and chum fry survival in marine waters because it varies greatly year to year and throws off the forecasts, and (c) monitoring the sex ration of pink salmon harvested by the purse seine fishery to determine if sex ratios could be used as an indication of run timing because pink salmon males predominate early in the run and the females predominate later.

Contact: Karl Hofmeister or James R. Dangle
Phone: (907-465-4250 or 907-747-6688)

Publications: Geiger and Savikko (Editors), 1989, 1990; Hofmeister and Dangle, 1989;
****

Purpose (Part 5): Southeast Alaska Coho Salmon Studies: Wild juvenile coho salmon were tagged with coded-wire tags and returning adult coho were counted and sampled in several stream systems of Southeast Alaska to estimate total spawning escapement, contributions to the fisheries, migratory patterns, age structure, and survival rates.

Contact: Leon Shaul
Phone: (907) 465-4250

Publications: Elliott, Schmidt, and Sterritt, 1989; Shaul, 1989a, 1989b; Suchanek and Bingham, 1989; and Wood (in press).
****

Project Description: Chignik sockeye and coho studies

Project Number: 5-AFC-76

Purpose: These studies at Chignik and Black Lakes in Alaska are aimed at (a) refining the sockeye salmon spawning escapement goals using 20 years of data, (b) forecasting the 1990 sockeye salmon run for the fishing industry and the Alaska Department of Fish and Game so the harvests can be made efficiently and managed appropriately, and (c) monitoring the fish populations and environment in the two lakes under a long-term study to predict changes in the fish community with changes in the size of the sockeye spawning escapement and environmental parameters.

Contact: Donald E. Rogers
Agency: University of Washington, Fisheries Research Institute
Phone: (206) 543-7546
Status: 3rd of 5 Years
Date Initiated: 1987

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:$	23,494	Federal:$	78,894
U. of W:	28,675	State:	82,975

Publications: Ruggerone, 1989.
****

INTERJURISDICTIONAL FISHERIES ACT

Project Description: Southeast Alaska Groundfish and Herring Research (2 parts - Both parts are included in the costs figures, not individually)

Project Number: 5-IJ-1

Agency: Alaska Department of Fish and Game
Status: 5 year project
Date Initiated: 1986

Current Year Segment Cost:		**Total Cost over life of project:**	
Federal:	230,220	Federal:	57,080
State:	76,740	State:	281,500

Purpose (Part 1, Groundfish studies): Collect information necessary for State management of certain groundfish fisheries the Eastern Gulf of Alaska. Specific tasks include (a) collecting catch (harvest plus discard) and effort data, (b) collecting biological data (length, weight, sex, maturity) from certain key species from landings and stocks assessment surveys, (c) continue the longline and trawl logbook programs, (d) conduct resource assessment and tagging studies on sablefish and rockfish, and (e) implement closures of the fisheries when harvest levels have been obtained.

Contact: Barry Bracken
Phone: (907) 772-3801

Purpose (Part 2): (a) refine or develop acoustic equipment to make reliable Herring biomass estimates; (b) conduct and evaluate acoustic assessments of major herring stocks in Southeastern Alaska for age and growth analyses as indicators of stock condition; (c) develop, conduct, and evaluate spawning ground studies to provide life history information and spawner numbers to use as a comparison of acoustic estimate and as a basis for quotas where reliable acoustic estimates cannot be made; and (d) provide information for inseason management of the Southeastern herring resource.

Contact: Dennis Blackenbecker
Phone: (907) 225-9877

Publications: Blankenbeckler, 1989; Bracken, 1989a, 1989b, 1989c, 1989d, 1990; O'Connell and Bracken, 1988.

ADMINISTRATIVE ORGANIZATIONS
NONFEDERAL COOPERATORS

STATES	AGENCY	ADDRESS
Alabama	James D. Martin, Commissioner Dept. of Conservation & Natural Resources (205) 261-3486	State Admin. Bldg. 64 N. Union St. Montgomery 36130
	Wayne Shell Auburn University, Fisheries Dept.	Swingle Hall Auburn 36849
Alaska	Don W. Collinsworth, Commissioner Dept. of Fish & Game (907) 465-4100	Box 3-2000 Juneau 99802
Arizona	Duane L. Shroufe, Director Dept. of Fish & Game (602) 942-3000	2222 W. Greenway Rd. Phoenix 85023
Arkansas	Steve N. Wilson, Director Game & Fish Commission (501) 223-6300	2 Nat. Resrc. Dr. Markham & I-430 Little Rock 72205
California	Peter J. Bontadelli, Director Dept. of Fish & Game (916) 445-5095	1416 Ninth Street Sacramento 95814
Colorado	James B. Ruch, Director Division of Wildlife Dept. of Natural Resources (303) 866-3311	6060 Broadway Denver 80216
Connecticut	Dennis P. DeCarli, Deputy Commissioner Dept of Environmental Protection (203) 566-4856	State Office Bldg. 165 Capitol Ave., Rm 243 Hartford 06106
Delaware	William C. Wagner, II, Director Division of Fish & Wildlife Dept. of Natural Resources & Environmental Control (302) 736-5295	P.O. Box 1401 Dover 19903
Florida	Thomas E. Gardner Executive Director Dept. of Natural Resources (904) 488-1555	3900 Cmnwlth Blvd. Tallahassee 32303
Georgia	J. Leonard Ledbetter, Commissioner Game & Fish Division Dept. of Natural Resources (404) 656-3500	Floyd Towers E. 205 Butler St. S.E. Suite 1252 Atlanta 30334

STATE	AGENCY	ADDRESS
Hawaii	Mr. Henry M. Sakuda, Director Division of Aquatic Resources Dept. of Land & Natural Resources (808) 548-4000	1151 Punchbowl St. Honolulu 96813
Idaho	Jerry M. Conley, Director Dept. of Fish & Game (208) 334-5159	600 S. Walnut P.O. Box 25 Boise 83707
Illinois	Mark Frech, Director Dept. of Conservation (217) 782-6302	Lincoln Tower Plaza 524 South Second Street Springfield 62701-1787
Indiana	Edward L. Hansen, Director Division of Fish & Wildlife Dept. of Natural Resources (317) 232-4080	607 State Office Bldg. Indianapolis 46204
Iowa	Larry J. Wilson, Director Dept. of Natural Resources (515) 281-8663	Wallace State Off. Bldg. 9th & Grand Des Moines 50319
Kansas	Robert L. Meinen, Secretary Dept. of Wildlife & Parks (913) 296-2281	900 Jackson St. Suite 502 Topeka 66612-1220
Kentucky	Don R. McCormick, Commissioner Dept. of Fish & Wildlife Resources (502) 564-3400	Arnold L. Mitchell Bldg. Game Farm Rd. Frankfort 40601
Louisiana	Virginia Van Sickle, Secretary Division of Fisheries Dept. of Wildlife & Fisheries (504) 765-2803	P.O. Box 98000 Baton Rouge 70898
Maine	William J. Brennan, Commissioner Dept. of Marine Resources (207) 289-2291	State House Station 21 Augusta 04333
Maryland	Dr. Paul Massicot, Administrator Tidewater Administration Dept. of Natural Resources (301) 974-2926	Tawes State Office Bldg. Annapolis 21401
Massachusetts	Philip G. Coates, Director Division of Marine Fisheries (617) 727-3193	Leverett Saltonstall Building 100 Cambridge St. Boston 02202
Michigan	David F. Hales, Director Dept. of Natural Resources (517) 373-2329	Stevens T. Mason Bldg. Box 30028 Lansing 48909

STATE:	AGENCY:	ADDRESS:
Minnesota	Dr.Larry R. Shannon, Director Division of Fish & Wildlife (612) 297-1308	Box 20, 500 Lafayette Road St. Paul 55146
Mississippi	Vernon Bevill, Exec. Dir. Dept. of Wildlife, Fisheries and Parks (601) 961-5300	Box 451 Jackson 39205
Missouri	Jerry J. Presley, Director Dept. of Conservation Fisheries Division (314) 751-4115	P.O. Box 180 Jefferson City 65101
Montana	Patrick J. Graham, Administrator Dept. of Fish, Wildlife & Parks Fisheries Division (406) 444-2449	1420 E. Sixth Ave. Helena 59620
Nebraska	Rex Amack, Director Game & Parks Commission (402) 464-0641	Box 30370 2200 N. 33rd St. Lincoln 68503
Nevada	William A. Molini, Director Dept. of Wildlife (702) 789-0500	1100 Valley Rd. P.O. Box 10678 Reno 89520-0023
New Hampshire	Donald A. Normandeau, Ph.D. Executive Director Fish & Game Dept. (603) 271-3421	2 Hazen Drive Concord 03301
New Jersey	George P. Howard, Director Div. of Fish, Game & Wildlife Dept. of Environmental Protection (609) 984-6215	CN-400 Trenton 08625
New Mexico	Bill Montoya, Director New Mexico Dept. of Game & Fish (505) 827-7905	Villagra Bldg. Santa Fe 87503
New York	Gordon C. Colvin, Director Division of Marine Resources Dept. of Envirronmental Conserv. (516) 751-7900	Building 40, SUNY Stony Brook 11794
North Carolina	William Hogarth, Director Dept. of Environment, Health Natural Resources (919) 726-7021	Box 76 Morehead City, 28557
North Dakota	Dale L. Henegar, Commissioner State Game & Fish Dept. (701) 221-6300	100 North Bismarck Expressway Bismarck 58501

STATE	AGENCY	ADDRESS
Ohio	Joseph J. Sommer, Director Division of Wildlife Dept. of Natural Resources (614) 265-6300	Fountain Square Building G-2 Columbus 43224
Oklahoma	Steve A. Lewis, Director Dept. of Wildlife Conservation Kim Erickson, Chief Fisheries Div. (405) 521-3851	1801 North Lincoln Oklahoma City 73152
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Gulf States Marine Fisheries Commission	Larry Simpson, Executive Director (601) 875-5912	P.O. Box 726 Ocean Springs, MS 39564

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In carrying out project activities, about 300 State scientists are continuously employed to gather information to improve fishery knowledge, solve fishery problems, and better manage fishery resources. Since this report was first begun, 20 years ago, these studies have resulted in publications, many of which have appeared in scientific journals or, have been for partial fulfillment of the requirement for advanced degrees from educational institutions. In 1989, 38 new publications resulted from these grants, totaling now 849. The project number that the publication resulted from is listed in parentheses, after each citation.

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